By the Sweat of Their Brow
Welfare to Work in Los Angeles

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Executive Summary

Welfare reform raises the prickly question of what mix of understanding, support and pragmatic pressure is needed to move welfare recipients into employment. Many workers are scrambling to keep the wolf from their own doors in the face of industry restructuring, rapid technological change, and intense pressures to increase corporate profits. In this highly competitive environment, workers are continually struggling to adapt and increase productivity because their survival is at stake. They might well ask whether welfare recipients deserve different treatment. At the same time, common sense and first hand experience tell us that most people are on welfare because of extreme life adversities, many have below-average skills, and Los Angeles County still has 5 percent fewer jobs than in 1990, even though the population has grown by five percent. Regardless of how we view welfare dependency, the reality is that a majority of aid recipients do work and are part of the low-wage workforce. We share an important practical interest in seeing welfare recipients successfully employed because the social fabric of the region will be damaged in ways that affect everyone if attempts at welfare reform leave us with increasing numbers of destitute families.

The nation's best known welfare program, Aid to Families with Dependent Children (AFDC) was created to give widows and destitute mothers the means to stay at home and care for children. However, the entry of large numbers of American mothers into the paid workforce has created increasing tension between the desire to care for impoverished children and the belief that able-bodied parents should earn their own living. Recent federal legislation has replaced AFDC with Temporary Assistance for Needy Families (TANF). California enacted CalWorks to implement this new federal block grant program, placing a five-year lifetime limit on aid for adults. Months in which the mother receives any part of her income from TANF count toward her lifetime five-year limit, making it critically important for welfare recipients to find stable, full-time employment that pays a living wage.

The purpose of this report is to provide practical, objective information that will help policy makers and program administrators create successful welfare-to-work programs in Los Angeles County, which has the nation's largest public assistance caseload.

One of the challenges in preparing a report on economic and employment characteristics of welfare recipients is that the actual make-up of the welfare population changes from

month-to-month and there is a dearth of information about occupations in which aid recipients are employed. The size and makeup of the welfare caseload is an artifact of the county's demography, economy and social conditions, and all of these factors change continuously. The core research strategy for this report was to use Public Use Microdata Sample (PUMS) data for Los Angeles County from the 1990 U.S. Census to identify occupations, industries and work-related characteristics of the day-to-day caseload of aid recipients, and then to update this information with current labor market data.

Profile of Aid Recipients

There is more variation in work history and education within the aid population than there is between recipients and the general workforce. For example, while 22 percent had an eighth grade education or less, 24 percent had at least some college, and while 24 percent had never worked, 26 percent were working in 1990. Important characteristics of the county's aid caseload include:

- Over three-quarters of aid recipients' earnings appear to come from jobs that do not provide legally mandated employee benefits such as Social Security, Unemployment Insurance, or Disability Insurance, much less health care coverage. This suggests that after exhausting their five-year maximum allotment of benefits, many former aid recipients may find themselves without the social protections afforded most American workers.

- Most working aid recipients need a car to commute to their jobs, manage the logistics of getting children to and from child care, and deal with other household needs such as groceries, laundry, and visits to medical clinics. Access to reliable, affordable transportation is likely to be a significant barrier to finding and keeping jobs for many aid recipients in the county.

- The average working aid recipient is employed for the annual equivalent of a half-time job. Finding long-term, full-time employment is fully as important and difficult as finding jobs that pay a living wage for aid recipients making the transition from welfare to work.

- Even among those receiving aid benefits, many families had difficulty surviving. Roughly one-half were sometimes unable to pay their rent on time, one-quarter sometimes did not have enough food for themselves and their children, one-quarter had limiting health conditions.

- Many aid recipients were actively trying to improve their life situation. One-quarter were attending school to improve their skills.

Comparing Single Mothers With and Without Aid

A fundamental difference between single mothers who are part of the welfare caseload and those who are not receiving aid is their educational attainment. Among non-recipients, only one-third do not have a high-school diploma, while among those receiving aid over half had not completed high school. About 44 percent of the non-recipients had at least some college-level education, while only half as many mothers receiving assistance had attended college.

A principal difference between many low-income single mothers surviving without aid and those receiving aid is the level of financial assistance they receive from other household members. The additional adults in non-aided households tended to have higher incomes and also, there were more of them per household with incomes compared to households with public assistance. Other significant differences between single mothers who were receiving public assistance with those not receiving assistance include:

- Only about 30 percent of single mothers receiving public aid were participating in the labor force in 1990 -- that is, either working or actively looking for work. A full 80 percent of non-recipient mothers were active in the labor force.
- Only 16 percent of the aid recipients in the county caseload were employed, while three-fourths of the non-aid group worked at the time of the 1990 Census.
- Over 85 percent of the income of single mothers not receiving aid comes from their jobs, while for aid recipients over 84 percent of their income comes from public grants. The overall average-annual income received by non-recipients is double that of those receiving aid.

Work-Readiness Groups Among Aid Recipients

The central question raised by impending welfare reform is, what works for moving very poor people into steady employment? A look at actual characteristics of different work-readiness groups within the welfare caseload provides a practical basis for designing programs that will help welfare recipients survive in the labor market.

About one-fifth of the county's caseload of single mothers were employed at the time of the Census, and had significant earnings (earning half or more of their total income), indicating that they had viable prospects for economic self-sufficiency. Another fifth were employed or had been employed in the past two years, but did not have significant earnings, indicating intermediate prospects for self-sufficiency for this group. And about

three-fifths of the county's caseload had not worked recently or had never worked, indicating difficult prospects for self-sufficiency.

Each of these three work-readiness groups was further divided into two subgroups: aid recipients born inside the United States, and those born abroad.

- Within each work-readiness group, recipients born in the United States were further removed from poverty than those born abroad.
- Those born abroad worked more hours at about three-quarters the hourly wage and for about four-fifths the average-annual income of their U.S.-born counterparts.
- Among recipients born in the U.S., higher levels of education were strongly associated with better labor market connections. The connection between education and successful employment was much weaker among recipients born abroad, most of whom lacked high school diplomas.
- The ability to speak English well or very well and eight or more years spent in the United States were predictors of stronger labor market connections among recipients born abroad.
- Within each ethnic group, mothers with at least a high school diploma had stronger labor market attachments than those without a high school diploma. However, Anglos and Latinas benefited more from a high school education than did Blacks. Among women with just a high school diploma, 31 percent of Anglos, 25 percent of Latinas, and only 16 percent of Blacks had significant earnings.
- Forty-eight percent of mothers receiving aid in Los Angeles County spoke a language other than English at home. Women with little or no English-speaking ability had weak labor market connections, and when they found jobs it was most likely as cleaners or sewing machine operators.
- Higher earnings among welfare workers tended to be the result of more hours worked as opposed to being in better-paying occupations than those held by welfare workers with lower earnings, suggesting a ceiling on possible earnings and prospects for self-sufficiency unless workers gain access to better occupations.
- Characteristics that predict improved prospects for employment and economic self-sufficiency, and that can be used to identify groups of aid recipients with different levels of need for training and supportive services, include: education, ability to speak English, number of children, age of children, work history, length of time since last job, occupation, and presence of other adults in the household who contribute income or assistance in caring for children.

Managing both Work and Parenting in Low Wage Jobs

A study of welfare workers in Los Angeles found that part of the reason why many recipients are unable to achieve economic self-sufficiency lies in the difficulty of combining parenting with work performed outside the home, especially for low-skilled workers. Most welfare recipients find employment in the low-wage labor market, and these jobs seldom offer workplace supports that reconcile competing demands of mother-hood and paid labor. Without adequate childcare and transportation, and without enough money to purchase private services, even the most stable jobs obtained by welfare recipients are likely to be short-lived.

Childcare arrangements among working welfare mothers are often unreliable, inconsistent, and "make-shift." In part, this is because low-skilled jobs often have unpredictable hours, and it is difficult to arrange a regular childcare situation for a job that does not have a consistent schedule. In addition, because they do not have enough money to purchase reliable, professional childcare services, low-income mothers often seek these services from other low-income mothers, who face many of the same work and family demands as the mothers of the children in their care.

The Los Angeles Labor Market

The decision to implement a major change in the administration of county welfare programs in California has come at the end of the most serious loss in employment in Los Angeles since the 1930s. Between 1990 and 1994, Los Angeles County lost 10 percent of its wage-and-salary jobs. One result was a substantial increase in the level of unemployment.

Historical labor force and welfare caseload data demonstrate a strong relationship between the number of jobs available that can support a family and the number of families that can support themselves. This is reflected in a direct correlation between changes in employment and changes in welfare caseloads in Los Angeles.

- Los Angeles County lost 436,700, or 10 percent, of its jobs between 1990 and 1994; by 1997 it had regained only 168,800 of these jobs.
- Despite the beginnings of an economic recovery, unemployment in Los Angeles County still averages close to 300,000.
- Because of the large number of discouraged workers, the true level of unemployment may well be as much as 150,000 to 200,000 higher than the official unemployment figure for Los Angeles County. This means that the actual current unemployment rate could be approximately 10.5 percent.

Jobs in Which Aid Recipients Find Work

Over the past five years, Los Angeles County's primary employment program for aid recipients, GAIN, has utilized a strategy called "Jobs First" that attempts to quickly move recipients into employment while minimizing time and money spent on skill development. Because of the emphasis on immediate employment, it is likely that many aid recipients are returning to the same jobs in which they previously worked. Occupations that are typical sources of employment for welfare workers were investigated to assess whether they offer prospects for stable, family-supporting jobs.

- Average weekly earnings of aid recipients as a percent of average weekly earnings of all workers in the same occupation ranged from a low of 40 percent for nursing aides and orderlies, to a high of 88 percent for sales workers.

- The average weekly hours worked per week by aid recipients as a percent of hours worked by all workers ranged from a low of 55 percent for sales supervisors and proprietors, to a high of 82 percent for janitors and cleaners.

- An average of one in four *non-welfare* workers and job seekers in occupations that employ large numbers of welfare workers had incomes below the poverty level.

Job Outlook for Aid Recipients

Two approaches were used to evaluate constraints facing adult welfare recipients seeking regular employment that will adequately support their families without welfare grants. The first examined employment trends in occupations in which welfare recipients have worked in the past. The second examined employment trends and wage rates in occupations that require one year or less of training, and which tend to match the training and education of most adults receiving welfare.

- Employment data for occupations in which welfare recipients have experience show that between 1990 and 1994, there was a sharp decline of 315,700 jobs in the county. A recovery of 61,000 of these jobs occurred between 1994 and 1996. Projections anticipate an average gain of 67,800 jobs per year in these occupations between 1996 and 1999.

- *Over the next two years there will be an average of 2.5 welfare-adult job seekers for every new net job opening expected to be created per year in Los Angeles County for occupations in which welfare recipients have experience. This estimate does not include other unemployed job seekers in the county.*

- Adding the estimate of potential welfare-adult job seekers to the total number of unemployed workers in county results in a ratio of 5.4 job seekers for every new job

opening within occupations in which welfare recipients have had experience. This ratio does not incorporate the considerable number of discouraged workers in the county.

- Among occupations appropriate for most welfare adults, three-fourths of the projected annual job openings offered new job applicants a median wage of $6.99 per hour or less. Nineteen percent of these projected openings were estimated to pay $7.00 to $9.99, and 1.3 percent paid $10 and over $10.00 per hour.

Recommendations

Employment of welfare recipients depends upon, and in turn will influence, the future growth path of the Los Angeles economy. The industrial structure and vitality of the region will determine the level of demand and type of work available for aid recipients. And in turn, the quality and availability of workers will influence the growth of industries in the region and type of new job opportunities that are created. Employment of aid recipients and growth of the economy to provide adequate job opportunities are linked developmental challenges for the Los Angeles region.

The goal of enabling all potential workers to put their skills to productive use in building a viable economy can be a unifying vision that informs and gives common purpose to public sector policy makers, welfare administrators, education, job training and supportive service organizations, and economic development professionals. Coordinated investments in worker skills, employment services, economic development, and job creation can yield high dividends through reduced social dependence and a stronger regional economy.

EMPLOYMENT-RELATED SERVICES FOR EACH WORK-READINESS GROUP

Significant investments in skill development and access to new, better-paid occupations are needed to enable most recipients in the county's welfare caseload to become financially self-sufficient before their five-year lifetime limit on aid benefits is exhausted. Successful employment and financial self-sufficiency are dependent upon having a number of skills and resources. Important factors that should be used in determining the work-readiness of aid recipients include:

- Education
- Ability to speak English
- Age of children
- Work history
- Length of time since last job
- Occupation
- Access to vehicle to get to work
- Other helping adults in the household
- Length of time on welfare

Individual assessment of participants' work-readiness is likely to result in modifying past practices under the county's GAIN program, with less emphasis placed on immediate full time employment for most recipients, and more emphasis placed on a balanced mix of part-time work, schooling and job training.

Individuals who are ready to search for a job should receive career counseling and job search assistance that effectively supports their re-entry into the labor market. Counseling should steer job seekers away from occupations that offer bleak prospects for financial survival. Work-related activities and services need to be tailored to the needs of each work-readiness group. The overall menu of needed services and activities includes:

- Job search and placement
- Full-time employment
- Part-time employment
- Subsidized employment
- Work tools and clothes
- Education
- English language training
- Job skills training
- Childcare
- Transportation assistance

ECONOMIC DEVELOPMENT AND JOB CREATION

One of the fundamental problems facing welfare workers in Los Angeles is the shortage of jobs, particularly jobs offering full-time, year-round employment. Economic development and job creation should be targeted on industries that will both hire welfare workers and provide opportunities to earn family-supporting incomes. Economic development projects should be based on analysis of the skill characteristics of available workers as well as the strengths of specific localities for business attraction and expansion. Economic development and job creation strategies that are needed to employ Los Angeles County's welfare workforce include:

- Retain and expand businesses in urban centers by facilitating capital access and partnerships with the corporate and university sectors.
- Develop nonprofit business enterprises through technical assistance and capital for expansion.
- Fund the California Infrastructure Bank.
- Target investment of public sector retirement fund assets for local economic development.
- Establish a secondary market for state and local economic development revolving loan funds, similar to Fannie Mae, to increase the amount of capital available to small businesses.
- Streamline and maximize business incentives for local economic development and package them into customized, flexible "bundles" for targeted industries.
- Use private or nonprofit agencies as temporary employment agencies to place and

support welfare workers.
- Create public service jobs.
- Provide subsidized work to build work experience and job skills for recipients without work histories.
- Provide improved local labor market and industrial base information.

LONG-TERM STRATEGIES FOR WELFARE FINANCING

At both the county and state levels an analysis should be made of the feasibility of severing portions of local and state funds for welfare from federal TANF funds to create a longer-term income maintenance program for individuals who are unlikely to achieve economic self-sufficiency within the time limits set by TANF.

Conclusion

It is beneficial for people who are able to work to have employment. Work offers dignity, standing in society, human relationships individuals otherwise would not have, and possibilities for an improved standard of living. At the same time, the Los Angeles region does not have enough jobs for everyone who needs work, and significant gains in both the carrying capacity of the local economy and the skill levels of aid recipients are needed to provide adequate opportunities for economic self-sufficiency. The need for a stronger economy and an expanding labor force of skilled, productive workers can provide a unifying vision for growth of the Los Angeles region.

Chapter 1
Introduction

The nation's best known welfare program, Aid to Families with Dependent Children (AFDC) was created to give widows and destitute mothers the means to stay at home and care for children. However, the entry of large numbers of American mothers into the paid workforce has created increasing tension between the desire to care for impoverished children and the belief that able-bodied parents should earn their own living. Recent federal legislation has replaced AFDC with Temporary Assistance for Needy Families (TANF). California enacted CalWorks to implement this new federal block grant program, placing a five-year lifetime limit on aid for adults. Months in which the mother receives any part of her income from TANF count toward her lifetime five-year limit, making it critically important for welfare recipients to find stable, full-time employment that pays a living wage.

The new welfare-to-work legislation allows Los Angeles County to exempt up to 20 percent of its caseload from the 60-month lifetime limit on aid for adults. The maximum allowable interval of continuous assistance is limited to 24 months for current recipients and 18 months for new recipients. In addition, 40 percent of single-parent families in the county's caseload are required to be working (or be involved in a work activity) for at least 32 hours a week by the year 2000, with the share required to be working increasing to 50 percent by 2002.

The purpose of this report is to provide practical, objective information that will help policy makers and program administrators create successful welfare-to-work programs in Los Angeles County, which has the nation's largest public assistance caseload. Welfare reform enjoys broad political support, but the five-year lifetime limit on aid for adults is far more ambitious than outcomes actually achieved in employment programs to date.

A national review of welfare-to-work demonstration programs found that in the past, employment initiatives have typically increased the share of welfare recipients with earnings by from 2 to 10 percent, and increased the amount they earned by from $250 to $3,000 a year, with the level of improved earnings linked to the level of training and supportive services provided to recipients. [1]

Employment, training, education, and work requirements can be cost-effective. However, even well-executed programs achieve only incremental gains in employment, often with a pattern of rapid job acquisition and rapid job loss.[2] The employment goals set by the new legislation are particularly daunting for Los Angeles County given its

painfully slow recovery from the 1990 recession. Thus, it is important that the county take seriously the implications of the five-year time limit on aid, and use it as a window of opportunity to equip individuals to be self-sufficient in the work place. No one will be well served by a future in which the county has growing numbers of destitute parents with access to neither government aid nor viable employment.

A corollary to increased emphasis on the importance of work is increased attention to availability of, and compensation for, employment. As we show in this report, most aid recipients have work histories, many in occupations that churn workers, offering short periods of employment followed by layoffs. Many of these occupations have an over-supply of workers, making it impossible for everyone who needs work to find a job. Recycling recipients through these dead-end jobs puts them at risk of exhausting their eligibility for TANF without gaining a solid foothold in the workplace.

For most working-age people, steady employment is the only feasible avenue to economic independence and a better life. In addition to offering the possibility of economic self-sufficiency, work gives most people their single most important connection with the larger community. Interestingly, this network of workplace relationships reflects the incompleteness of workers' skills just as much as their capacities for productivity. It is exactly the fact that each of us have imperfect abilities to perform tasks essential to our well-being that connects us with other people whose skills we depend on, be they garment workers, computer programmers, farmers, teachers, engineers, mechanics, health care professionals, construction workers, journalists, or police. The workplace is a setting in which each of us seeks to perform something of value and depends on reciprocity from others with skills we lack. Being part of a social fabric that interconnects the energy, motivation, knowledge, skills, and productive opportunities of this region's inhabitants is an unavoidable consequence of our inter-dependent economy.

Seen in this light, we each hold a place in a continuum of workplace success that is shaped by innate abilities, life choices and external circumstances; a continuum in which few of us are completely secure and aid recipients are among the most insecure. In this continuum, yesterday's aerospace worker can become today's long-term unemployed worker. As a result of explicit national policy there are fewer jobs than workers. The Federal Reserve Board uses interest rates to maintain a minimum unemployment rate of 5 to 6 percent to keep workers from seeking higher wages, ostensibly to reduce inflation.[3] Given that insecurity for many and misfortune for some are an inherent feature of the economy, our region is defined as much by its resourcefulness in utilizing the productive potential of unemployed workers as it is by rewards offered to highly skilled workers.

Welfare reform raises the prickly question of what mix of understanding, support and pragmatic pressure is needed to move welfare recipients into employment. Many workers are scrambling to keep the wolf from their own doors in the face of industry

restructuring, rapid technological change, and intense pressures to increase corporate profits. In this highly competitive environment, workers are continually struggling to adapt and increase productivity because their survival is at stake. They might well ask whether welfare recipients deserve different treatment. At the same time, common sense and first hand experience tell us that most people are on welfare because of extreme life adversities, many have below-average skills, and Los Angeles County still has 5 percent fewer jobs than in 1990, even though the population has grown by five percent.[4] Regardless of how we view welfare dependency, the reality is that a majority of aid recipients do work and are part of the low-wage workforce. We share an important practical interest in seeing welfare recipients successfully employed because the social fabric of the region will be damaged in ways that affect everyone if attempts at welfare reform leave us with increasing numbers of destitute families.

An underlying theme of this report is that there is no single solution for employing aid recipients. People receiving welfare have all of the diversity of the general population. Welfare-to-work programs need to connect strategic labor market information with information about individual needs and strengths as the basis for equipping recipients to find and keep stable jobs. This is the first of three planned reports that will provide information to support successful employment of public assistance recipients in Los Angeles County. The second report will discuss skill requirements and labor market conditions in occupations offering the most promising prospects to aid recipients, and the third report will review employment outcomes of individuals who have participated in Los Angeles County's GAIN program during this decade.

We begin this report with a profile of aid recipients and go on to identify employment-related differences between single mothers receiving aid and those who are able to support themselves through their earnings. We analyze aid recipients in different work-readiness groups – some requiring relatively modest levels of support to become employed and others requiring sustained support. This is followed by a closer look the difficulties faced by low-income parents who combine parenthood with employment in the low-wage labor market.

Next, we describe recent trends in Los Angeles' labor market and the close relationship between changes in employment levels and welfare caseload size. We continue with a detailed description of occupations in which aid recipients find work, earnings in these occupations, changes in the number of jobs available in each occupation over this decade, and the total range of entry-level jobs that might offer employment for welfare recipients. We conclude with recommendations about employment-related services for each work-readiness group, job search strategies for avoiding occupations offering poor prospects for economic survival, and the need for job creation.

Notes

[1] Demetra Smith Nightingale and Pamela A. Holcomb, "Alternative Strategies for Increasing Employment," ***The Future of Children, Welfare to Work***, Vol. 7, No. 1, Spring 1997, p.58. Similarly, one of the original studies that included San Diego County and led to the Jobs-First model found that 5 to 10 percent of participants in welfare-to-work programs had increases in earned income. Daniel Friedlander and Judity M. Gueron, ***Are High-Cost Services More Effective Than Low-Cost Services? Evidence from Experimental Evaluations of Welfare-to-Work Programs***, Manpower Demonstration Research Corporation, 1990, p. 26.

[2] Studies in two cities found that 57 to 62 percent of welfare recipients lost their first job within six months of being hired. Alan M. Hershey and LaDonna A. Pavetti, "Turning Job Finders into Job Keepers," ***The Future of Children, Welfare to Work,*** Vol. 7, No. 1, Spring 1997, p. 76.

[3] For a discussion of the role of the "natural rate of unemployment" in holding down inflation see the ***Economic Report of the President***, U.S. Government Printing Office, February 1997, pp. 45-49.

[4] California Employment Development Department data from employer payroll reports (ES-202 file) for March 1998 shows that Los Angeles County's total employment in all industries was 3,958,300 compared to the high point of 4,174,000 in June 1990. It should be noted that data from the Current Population Survey shows higher total employment for the county, but this data is based on monthly changes in a survey sample of less than 2,000 county residents and is considered less reliable than the count of actual employment from employer payroll tax reports. Population growth estimates are from the UCLA Business Forecasting Project.

Chapter 2
Approach to Understanding Jobs of Aid Recipients

One of the challenges in preparing a report on economic and employment characteristics of welfare recipients is that the actual make-up of the welfare population changes from month-to-month and there is a dearth of information about occupations in which aid recipients are employed. The number of people receiving AFDC-FG benefits in Los Angeles County increased from 520,000 in 1990 to a peak of 694,000 in 1995, and then declined to 621,000 in 1997.[1] Much of this change was due to the onset of the 1990 recession and the recovery that began in 1995, and other changes are attributable to demographic restructuring occurring in the region.

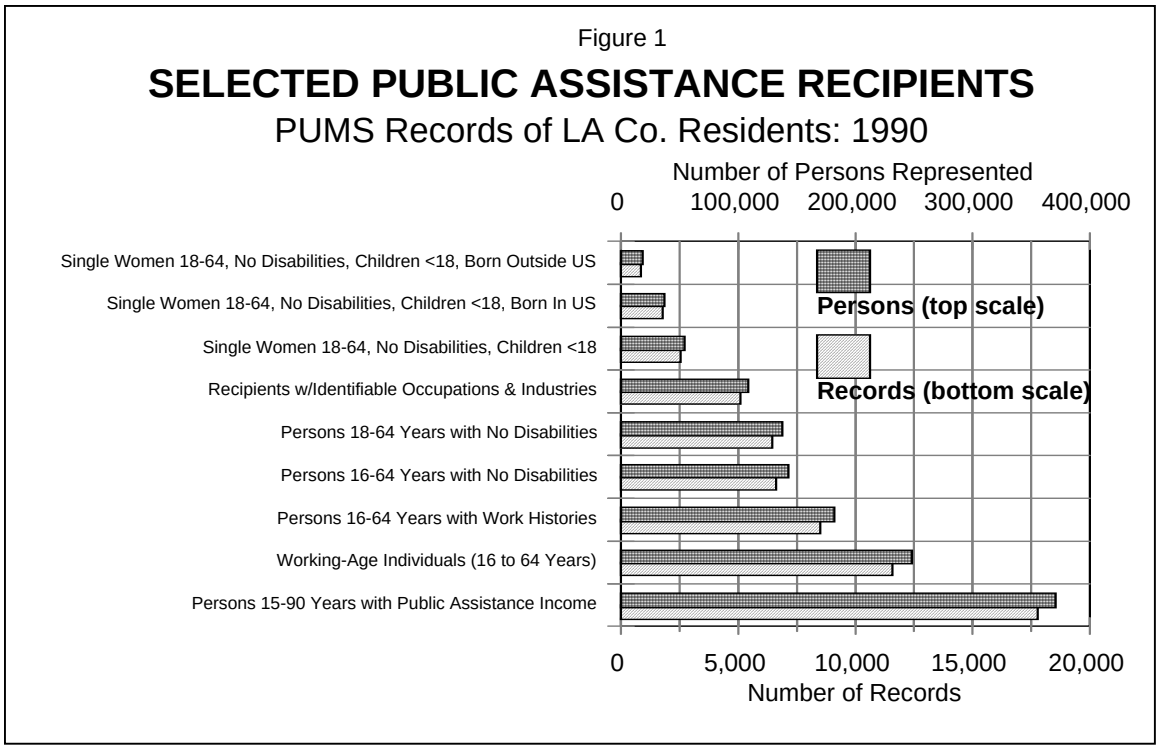
The size and makeup of the welfare caseload is an artifact of the county's demography, economy and social conditions, and all of these factors change continuously. Furthermore, much of the available data about aid recipients describes their eligibility characteristics, family structure, and aid benefits, rather than their labor market connections. What information there is about occupations, skills and work duration tends to be from national samples. Given that the Los Angeles economy employs workers in over 740 occupations and 750 industries,[2] a large body of information is needed to reliably describe the characteristics and labor market experiences of workers in each occupation and industry.

The core research strategy for this report was to use Public Use Microdata Sample (PUMS) data for Los Angeles County from the 1990 U.S. Census to identify occupations, industries and work-related characteristics of aid recipients, and then to update this information with current labor market data.

PUMS provides complete records of individual responses to the long-form Census questionnaire for five percent of the population. Each record is individually weighted based on its representativeness of the total population. Using these weighting factors, the data can be expanded to represent the total population. Each record contains 242 categories of information, many of them related to work. Because the entire population is represented, including welfare recipients, it is possible to see aid recipients in the same frame of reference as other members of the workforce.

The reader should also be aware of several weaknesses in PUMS data. First, the 1990 Census undercounted poor people in Los Angeles County, particularly people living in difficult-to-find or dangerous locations. This means that the poorest families, such as those living in cars or abandoned buildings, are likely to be under-represented. Second,

Figure 1



Census responses are influenced by people's natural inclination to avoid disclosing information that may seem stigmatizing or embarrassing. This means that people who received welfare but wanted to affirm their mainstream standing may not have disclosed their welfare income. Third, all forms of public assistance income are combined in a single category. This means that income from AFDC, SSI (Supplemental Security Income) and GR (General Relief) is not distinguishable based on how the income is reported, and specific groups of recipients must be identified based on secondary characteristics that encompass the target group and eliminate other groups. And fourth, the data represents the public assistance population as it was in 1990, not necessarily as it is in 1998.

We deal with limitations of PUMS data in several ways. First, we describe the relative characteristics and size of aid recipient groups rather than their absolute number in the county's population. Second, we focus on analyzing characteristics of AFDC-FG (Family Group) recipients, which are primarily households headed by single women and make up the preponderance of people who must make the transition from welfare to work. In Los Angeles County, single mothers and their children make up 79 percent of all AFDC households.[3] We isolate these records in PUMS data by identifying unmarried women without disabilities (to eliminate SSI recipients) with children seventeen years of age and younger who received public assistance income. And third, where possible we validate and update PUMS records with other more recent data. Despite its limitations,

Census data remains the most reliable and detailed information we have about the county's population.

The PUMS data set from the 1990 Census has over 440,000 records of county residents, and over 17,600 records of individuals who received at least part of their income from public assistance in 1989, as shown in Figure 1. There are nearly 2,500 records of single women 18 to 64 years old, without disabilities, with children under 18, who received public assistance. This group of aid recipients is a close proxy for AFDC-FG recipients. It is particularly valuable that this sample contains an adequate subsample of aid recipients born outside the United States (788 records representing 15,991 women) because individuals who were educated in other countries and migrated to the United States have a distinct labor force profile. This is the smallest population group shown in Figure 1, but it is still sufficiently large to support useful analysis. In our analysis we use the entire population of aid recipients to identify occupations in which welfare recipients find work, and the records that approximate AFDC-FG recipients to explore job-related characteristics of individuals now required to find work.

The PUMS sample appears to approximately represent Los Angeles County's public assistance caseload at the time of the Census survey in 1990, making it a valuable tool for understanding employability and employment needs of the current caseload. The PUMS sample is less useful for understanding the total population of people in the county who have received public assistance at some time in their lives. This is because long-term welfare recipients fill caseload slots for multiple years and therefore are more likely to be enumerated in surveys, while people with brief financial emergencies may only fill a caseload slot for several months and are less likely to be enumerated.

By taking a "snapshot" of people receiving public assistance in a given year, the Census sample unavoidably includes a percent of long-term recipients that is larger than their share of the total population of people who have received public assistance. The total population of people who have received aid includes more people with sufficient strengths, skills and resources to escape welfare than is reflected by PUMS data or than is found in the actual public assistance caseload on a given day.

This point is illustrated by the California Work Pays Demonstration Project, which began with a "snapshot" sample of participants who were in Los Angeles County's welfare caseload in October 1992. Only 16 percent of the recipients in this sample had been on welfare for 12 months or less. Over the next two-an-one-half years, recipients who got off welfare and left the sample were replaced by new cases flowing into the public assistance system, and of these new replacement cases at least 46 percent had received welfare for less than 12 months when the evaluation ended.[4] This demonstrates that many people experience brief stints of welfare dependency, and the caseload awaiting welfare-to-work programs is tilted toward a population that has difficulty exiting welfare independently.

However, on a practical level the concrete problem facing the Los Angeles region is to help the day-to-day caseload of recipients find employment. PUMS data provides unique work-related information about a large sample of aid recipients who have been part of the county's welfare caseload and, we believe, reliably represents the day-to-day caseload.

In this study we focus on the employment and income of individuals because it is *individuals* who find and perform jobs. At the same time it is also true that economic survival occurs at a household level, and many welfare households have survival resources beyond the earnings or public assistance benefits of a single head-of-household.[5] We touch on this issue later in the report but our primary focus is on employment of individuals because it is individuals' earnings and work behavior that are the focus of the new welfare-to-work regulations.

Notes

[1] For a review of all aid programs and the social context of welfare reform see Jennifer Wolch and Heidi Sommer, ***Los Angeles in an Era of Welfare Reform: Implications for Poor People and Community Well-being***, Southern California Inter-University Consortium on Homelessness and Poverty, 1997.

[2] The number of occupations is from the Employment Development Department's Occupational Employment Statistic (OES) survey of Los Angeles County, the number of industries is from data on Los Angeles County contained in ***County Business Patterns*** produced by the U.S. Bureau of the Census.

[3] Los Angeles County Department of Public Social Services caseload statistics for AFDC-FG and AFDC-U cases with aided adults and children in August 1997.

[4] Rosina M. Becerra, Alisa Lewin, Michael N. Mitchell, Hiromi Ono, ***California Work Pays Demonstration Project: January 1993 through June 1995***, Welfare Policy Research Group, UCLA, December 1996, Table 2.5 revised. The percent of cases in the replacement sample that were on welfare 12 months or less was estimated by subtracting cases admitted during the last 12 months of the program, and dividing the number of replacement cases that were admitted to the program at least 12 months before the evaluation ended and received 12 months or less of aid by the total number of replacement cases. This is a conservative approach and it is probable that it understates the percent receiving aid 12 months or less by excluding those who were admitted in the last 12 months of the program and who left welfare before the program concluded.

[5] For an analysis of economic resources of welfare households see Thomas MaCurdy and Margaret O'Brien-Strain, ***Who Will Be Affected by Welfare Reform in California?***, Public Policy Institute of California, February 1997.

Chapter 3
Profile of Aid Recipients

The diversity of personal characteristics and labor market connections of aid recipients suggests that "one-size-fits-all" solutions will not meet their varied needs for achieving economic self-sufficiency. This chapter gives an overview of aid recipients in Los Angeles County, looking at the total working-age population, employment and earnings, transportation needs, hours of work, and survival indicators.

The diversity of public assistance recipients in Los Angeles County as well as the predominance of people with work histories can be seen in Figure 2. This is a profile of working age (16 to 64 years) public assistance recipients without disabilities that might prevent work (factors limiting or preventing work, or mobility or personal care limitations); it is drawn from 1990 PUMS records. This population includes recipients both of Aid for Families with Dependent Children and General Relief. Highlights include:

- 26 percent worked in 1990
- 74 percent had worked at some point in their lives
- 24 percent had never worked
- 40 percent of those who worked in 1989 worked fewer than 40 hours a week
- 75 percent of those who worked in 1989 worked fewer than 50 weeks
- 24 percent had at least some college
- 23 percent had just a high school diploma
- 53 percent did not have a high school diploma
- 77 percent were women and 23 percent were men
- 30 percent were married and 40 percent had never been married
- 60 percent were born in the U.S.
- 10 percent were naturalized citizens or born to U.S. parents living abroad
- 30 percent were not citizens[1]
- 23 percent spoke English either not well or not at all
- 15 percent had immigrated between 1982 and 1990, and 25 percent prior to 1982

While everyone received aid and most were employable (with over one-quarter employed at the time of the Census), but there is still a great deal of heterogeneity in the population of aid recipients. For example, while 22 percent had an eighth grade education or less, 24 percent had at least some college, and while 24 percent had never worked, 26 percent were working in 1990.

Figure 2

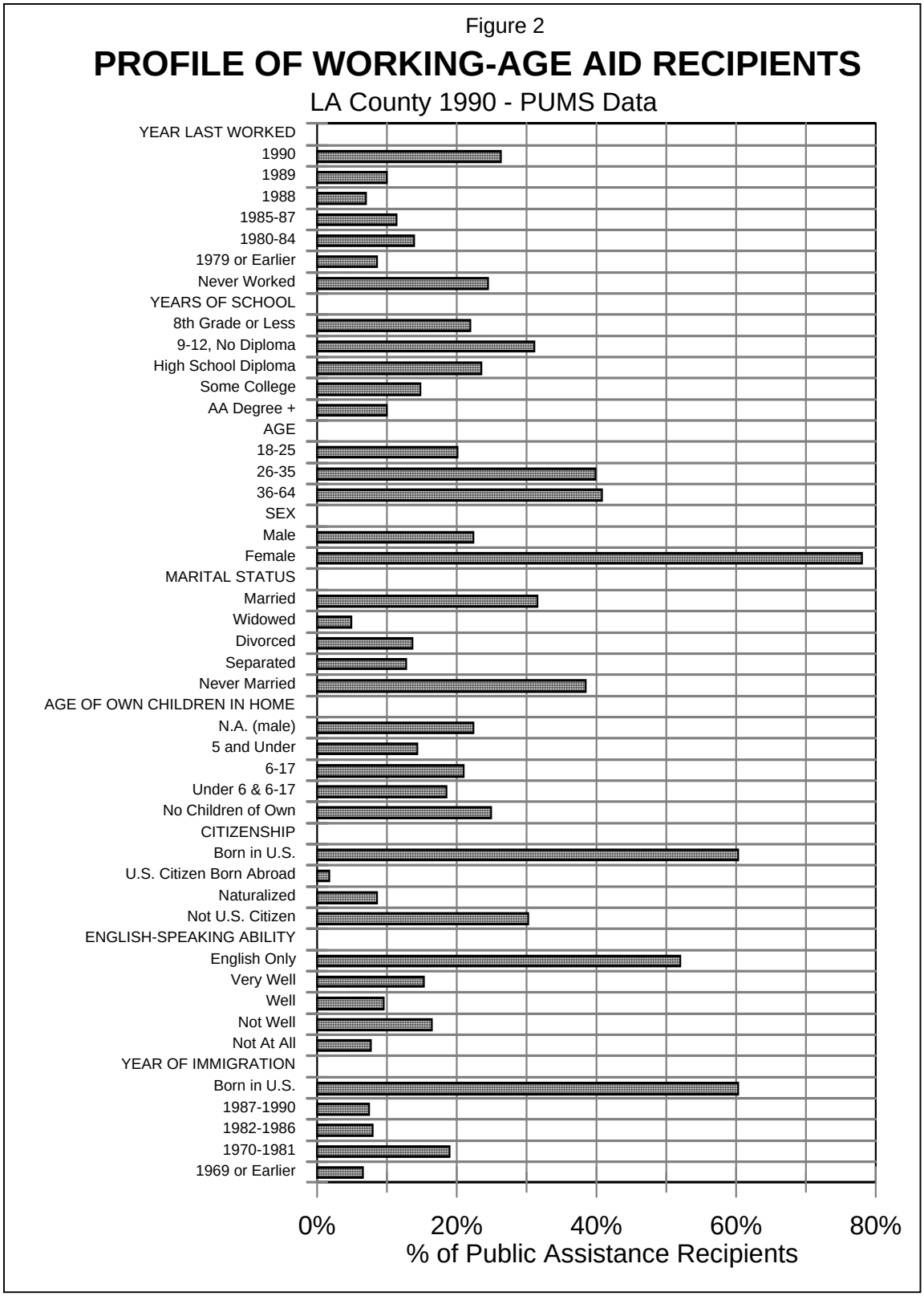
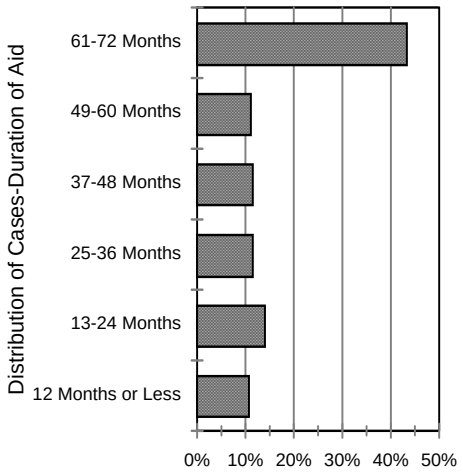

PROFILE OF WORKING-AGE AID RECIPIENTS
LA County 1990 - PUMS Data
YEAR LAST WORKED
1990
1989
1988
1985-87
1980-84
1979 or Earlier
Never Worked
YEARS OF SCHOOL
8th Grade or Less
9-12, No Diploma
High School Diploma
Some College
AA Degree +
AGE
18-25
26-35
36-64
SEX
Male
Female
MARITAL STATUS
Married
Widowed
Divorced
Separated
Never Married
AGE OF OWN CHILDREN IN HOME
N.A. (male)
5 and Under
6-17
Under 6 & 6-17
No Children of Own
CITIZENSHIP
Born in U.S.
U.S. Citizen Born Abroad
Naturalized
Not U.S. Citizen
ENGLISH-SPEAKING ABILITY
English Only
Very Well
Well
Not Well
Not At All
YEAR OF IMMIGRATION
Born in U.S.
1987-1990
1982-1986
1970-1981
1969 or Earlier
0%
20%
40%
60%
80%
% of Public Assistance Recipients

Figure 3

AID HISTORY--L.A. COUNTY 1992

% AFDC-FG Cases on Aid in Prior 72 Mo.



Employment and Earnings

An investigation of efforts to employ aid recipients in Los Angeles County has been carried out by the Welfare Policy Research Group at UCLA with support from the California Department of Social Services.[2] This research tracked efforts by the California Work Pays Demonstration program from 1993 to 1996 to enable AFDC recipients to move off welfare rolls and into jobs. The component carried out by the Los Angeles County Department of Public Social Services began in January 1993 with a random sample of 3,821 single-parent families selected to be representative of the total caseload receiving AFDC-FG benefits.[3]

A review of participants' work histories found that 44 percent had been employed in the previous two years and that the average annual income of those who worked was $553. Their aid histories showed that during the previous six years, 43 percent had received aid for more than five years, and 10 percent for one year or less. A distribution of AFDC-FG participants by the length of time they had received aid is shown in Figure 3. Because the sample represents the overall county caseload, this distribution reflects all single-parent families in the county receiving aid at the beginning of 1993.

Starting in January 1993 and continuing for thirty months these families experienced interventions intended to move them into jobs. Interventions included the loss of approximately 6 percent of their basic grant, waivers allowing ownership of vehicles worth up to $4,500, and the opportunity to keep the first $30 and one-third of the remainder of all income they earned in addition to their basic grant. Employment outcomes are shown in Figure 4. Ten percent had earnings in the first quarter of the program and 20 percent in the tenth quarter when the evaluation concluded.

Figure 4

PERCENT OF AFDC-FG CASES WITH EARNINGS

Work Pays LA County Cases 1992-1995

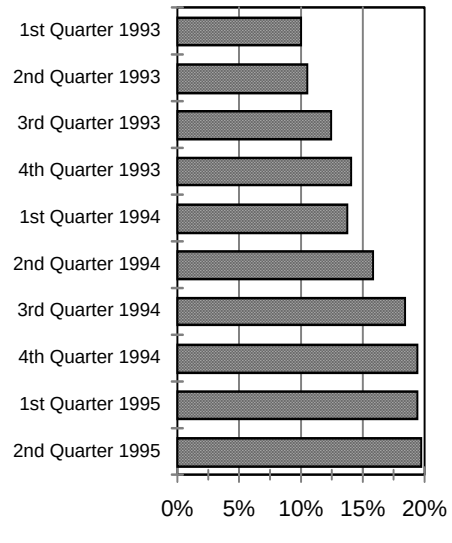
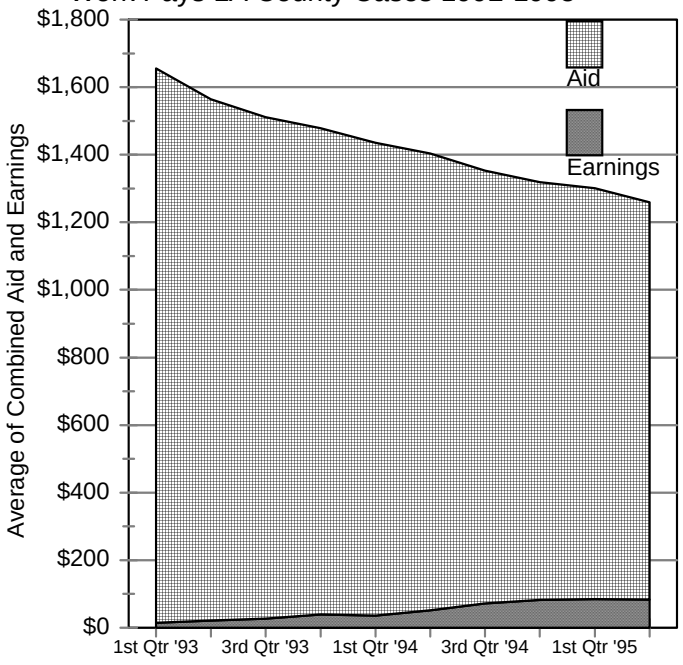


Figure 5
AVERAGE AID AND EARNINGS-ALL CASES
Work Pays LA County Cases 1992-1995



California's payroll tax files show that the average earnings of those who worked was $146 in the first quarter ($49 per month) and $429 in the tenth quarter ($143 per month).[4] Thirty-three percent of participants had earnings during the 30-month evaluation period, and 68 percent were still receiving aid at the end of this period.

The total amounts of grants paid and wages earned were averaged on all participants to produce a quarterly average of grants and earnings, which is shown in Figure 5. The ratio of dollars earned to dollars received in aid (with both earnings and aid averaged over all participants – those who worked as well as those who did not) was 1 to 117 in the first quarter of the program, and 1 to 14 in the tenth quarter. The ratio of earnings to aid improved considerably over the thirty months of the program, but payroll tax records for the final quarter showed that the aggregate earnings of all participants still averaged only 7 percent of their total income.

The Welfare Policy Research Group's work provides a benchmark for gauging the extent to which PUMS data represent the county's aid caseload, as reflected by the representative sample of AFDC-FG recipients selected for the Work Pays demonstration program. Two key benchmarks from the Work Pays data are that 44 percent of AFDC-FG recipients had worked in the two years prior to the study (1991 and 1992) and that the average annual earnings of those who worked was $553. Within the sample of PUMS data constructed to represent AFDC-FG recipients (unmarried women 18-64 with public assistance incomes, children under 18, and no disabilities) the corresponding benchmarks are that 38 percent worked in the 27-month period of January 1988 through March 1990, and that the average-annual earnings of those who worked in 1989 was $6,862. The discrepancy between these two reported income figures is discussed in the next section.

Looking just at those who worked rather than the entire population receiving aid, the ratio of earned income (both wage and self employment income) to public assistance income shown by PUMS data was 1.4 to 1. This ratio is more encouraging than that shown by

Work Pays data, showing that AFDC-FG recipients with jobs earned about 59 percent of their total income. Still, for this group of employed women to leave welfare without setbacks they would have to increase their aggregate earnings by 170 percent.

The goals set for Los Angeles County under the new welfare reform legislation, call for roughly doubling the number of aid recipients who work and doubling the amount they earn by the year 2002. These goals are set far above the achievements of past welfare employment programs and will be difficult to reach.

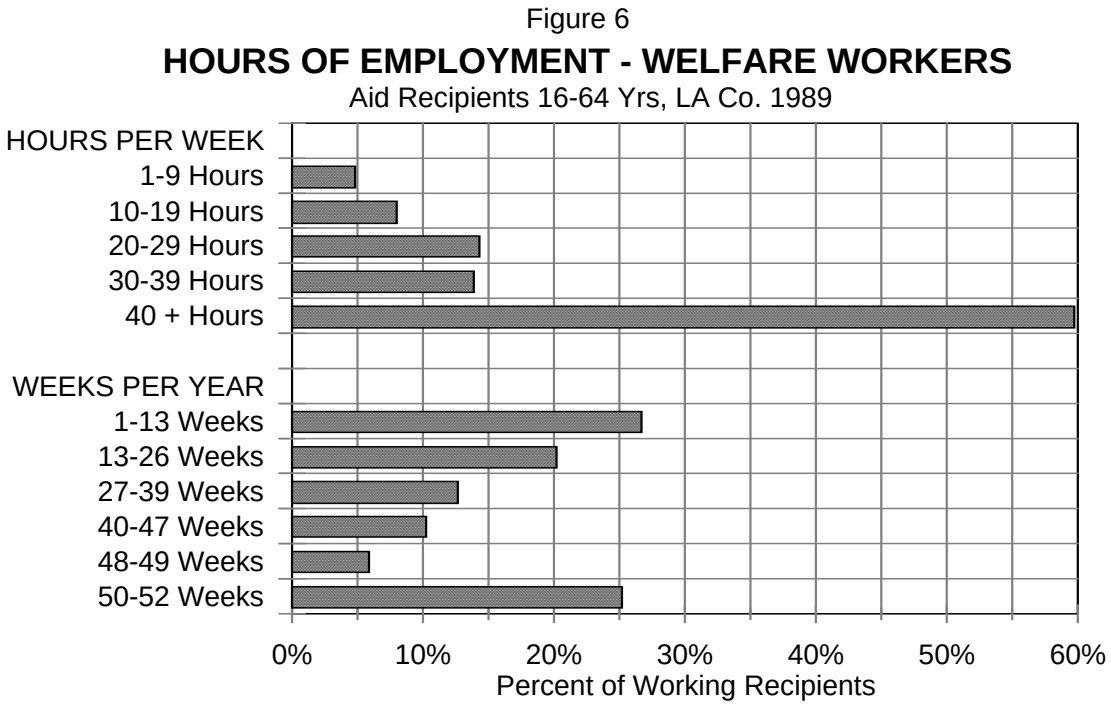
Jobs in the Underground Economy

The Work Pays and PUMS samples are reasonably close in terms of the percent of aid recipients who found work, but have a large disparity in the amount they earned. The primary reason why PUMS data shows higher earnings is probably that the Work Pays project only examined income covered by the Unemployment Insurance system, which does not reflect earnings in the underground economy (no taxes or benefits) where many low-income workers find jobs. Other possible explanatory factors may be: (1) Census respondents with scant earnings may tend to inflate their incomes, (2) the loss of two dollars in aid benefits for every three dollars earned may have been a weak incentive for Work pays participants to increase reportable earnings, or (3) the PUMS data may represent a more longitudinal aid population that is less aid-dependent than the "snapshot" sample drawn for the Work Pays program.[5] In terms of providing a benchmark for assessing the representativeness of PUMS data, Work Pays data suggests that the PUMS sample does not present an unduly pessimistic picture of the county's welfare caseload.

Comparison of Work Pays and PUMS data offers a troubling indication that over three-quarters of the jobs found by aid recipients provide no employee benefits, leaving them with no access to a social safety net except welfare. Official payroll records show that Work Pays participants earned less than one-tenth the income reported by comparable aid recipients in the Census survey, with the probable explanation being that much of the balance of their income was earned in the underground economy. This means that when they work they do not receive Social Security benefits to build retirement income, Unemployment Insurance to support them between jobs, Disability Insurance to cover work injuries, or health insurance to pay medical bills. If welfare reform moves more poor mothers into the underground economy, the net result will be to make them and their children more vulnerable to disaster, lacking the social guarantees enjoyed by most American workers.

Questions needing further study include: What share of jobs held by the working poor are in the underground economy? How will poor families in particular and health care in general be affected by the absence of social safety nets? And how can more jobs be brought under coverage of legally mandated payroll benefits?

Figure 6



Hours of Work

When aid recipients find jobs, most (60 percent) are able to work forty or more hours a week, but only half (53 percent) work for more than half the year, as shown in Figure 6. Aid recipients with jobs worked an average of 836 hours in 1989, a year in which the county's labor market provided more jobs than in 1998. This suggests that finding full-time, year-round employment is fully as important and difficult as finding jobs that pay a living wage for aid recipients.

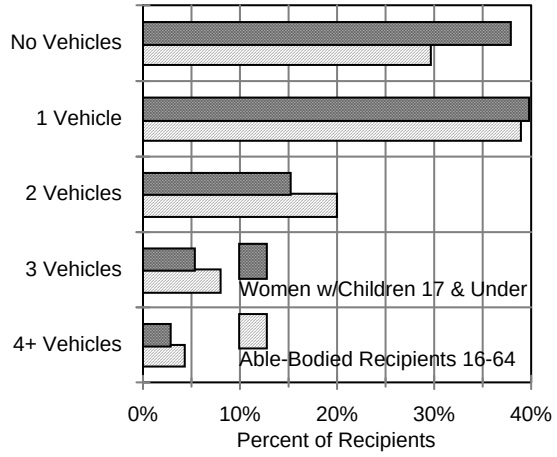
Transportation to Work

Most jobs, including those of the working poor, are located outside communities where workers live.[6] This raises particular difficulties for single mothers, who have the least time available for long commutes. Aid recipients who begin working must find means of mobility for taking their children to childcare, continuing on to work, and then completing the reverse journey at the end of the day. Thirty eight percent of households with a mother and children receiving aid do not have access to a vehicle, based on the PUMS data shown in Figure 7. Of course, having access to a vehicle does not necessarily mean that the job seeker has a driver's license, automobile insurance, a vehicle that runs

Figure 7

HOUSEHOLD ACCESS TO VEHICLE

Public Assistance Recipients L.A. Co.



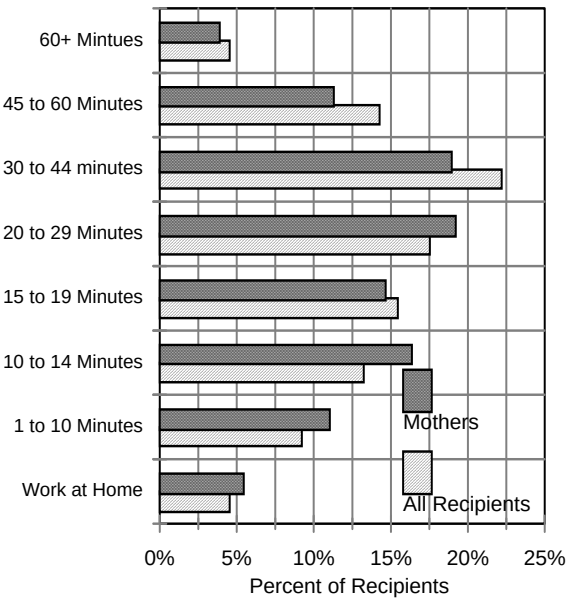
are thus likely to have shorter commute times but also to be of poorer quality.

Cars, light trucks and vans are the primary means by which aid recipients get to work – used by 66 percent of mothers and 72 percent of all recipients who had jobs. Public transit buses are the second most frequent way of getting to work – used by 18 percent of mothers and 14 percent of all recipients who work, as shown in Figure 8.

Figure 9

TIME SPENT TRAVELING TO WORK

Recipients 16-64 Who Worked Last Week



Women with children spend less time commuting than the overall population of aid recipients, as shown in Figure 9. Roughly two-thirds spend half an hour or less commuting. The combined load of household manage-

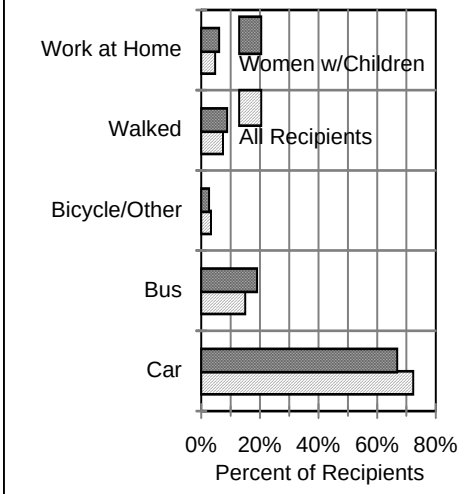
every day, or stronger claims to the vehicle than other household members.

As jobs move further away from central cities, people with significant family demands and limited transportation resources have access to a smaller pool of jobs because they are restricted to job searches close to their homes. The jobs they do find

Figure 8

MEANS OF TRANSPORTATION TO WORK

Public Assistance Recipients L.A. Co.



ment, childcare logistics and work limits the range of mobility of working mothers. Given the shortage of transit buses and unreliability of bus schedules on many heavily traveled lines, transportation for the working poor is likely to become a growing problem as increasing numbers of aid recipients enter the workforce.

Survival Indicators

Research conducted for the Work Pays program included extensive interviews with 3,565 participants.[7] Responses provide a measure of the austere living conditions of participants under the old AFDC program, and offer food for thought about the potential for further reductions in living standards when eligibility for aid comes to an end. Table 1 shows that roughly one-half had sometimes been unable to pay their rent on time, one-quarter sometimes did not have enough food for themselves and their children, one-quarter had limiting health conditions, and one-quarter were attending school to improve their skills.

Table 1
SURVIVAL INDICATORS
Survey of 3,565 AFDC Recipients
California Work Pays Demonstration Program
Surveyed October 1993 – September 1994

	African-American	White non-Hispanic	Latino	Asian and Armenian Immigrants
Unable to pay rent on time in last 12 months	47%	46%	42%	n.a.
Children did not have enough food to eat	25%	18%	34%	16%
often	*5%*	*4%*	*5%*	4%
sometimes	*9%*	*6%*	*11%*	8%
only rarely	*11%*	*8%*	*17%*	4%
Parent did not have enough food to eat	29%	25%	35%	14%
often	8%	9%	7%	4%
sometimes	11%	9%	13%	7%
only rarely	10%	7%	16%	4%
Parent has limiting health condition	32%	26%	18%	34%
Child has limiting health condition	24%	18%	15%	7%
Attending School, ESL, or vocational training	19%	22%	24%	25%

Summary of Findings

- There is more variation in work history and education within the aid population than there is between recipients and the general workforce. Welfare-to-work programs need to respond discerningly to the individual needs and strengths of aid recipients for becoming economically self-sufficient.

- One-quarter of the welfare caseload is typically employed at a given point in time.

- Over 40 percent of the county's caseload at a point in time has received aid for more than five of the past six years.

- Over three-quarters of aid recipients' earnings appear to come from jobs that do not provide legally mandated employee benefits such as Social Security, Unemployment Insurance, or Disability Insurance, much less health care coverage. This suggests that after exhausting their five-year maximum allotment of benefits many former aid recipients many find themselves without the social protections afforded most American workers.

- Most working aid recipients need a car to commute to their jobs, manage the logistics of getting children to and from child care, and deal with other household needs such as groceries, laundry, and visits to medical clinics. Access to reliable, affordable transportation is likely to be a barrier to finding and keeping jobs for many aid recipients in the county.

- The average working aid recipient is employed for the annual equivalent of a half-time job. Finding long-term, full-time employment is fully as important and difficult as finding jobs that pay a living wage for aid recipients making the transition from welfare to work.

- Even with aid benefits many public assistance families have had difficulty surviving. Roughly one-half were sometimes unable to pay their rent on time, one-quarter sometimes did not have enough food for themselves and their children, one-quarter had limiting health conditions.

- Many aid recipients were actively trying to improve their life situation. One-quarter were attending school to improve their skills.

Notes

[1] Individuals who are not citizens become eligible for public assistance if they have a child who is a citizen or if they qualify for support under provisions of the federal Refugee Act.

[2] Rosina M. Becerra, Alisa Lewin, Michael N. Mitchell, and Hiromi Ono, ***California Work Pays Demonstration Project: January 1993 through June 1995***, Welfare Policy Research Group, School of Public Policy and Social Research, UCLA, December 1996.

[3] There was an additional component in Los Angeles County with 1,971 two-parent families (AFDC-U) that is not discussed in this report. It should be noted that the California Work Pays Demonstration Project (CWPDP) is distinct from the GAIN program which was also underway at the same time, although there may have been some overlap in participants.

[4] Earnings records were obtained from the Unemployment Insurance Wage and Claims File maintained by the California Employment Development Department.

[5] The discrepancy between the amount of earned income the two data sets report for aid recipients who work is so striking that this comparison should be treated cautiously. CWPDP is a "snapshot" sample of welfare cases in the county as of October 1992. Because long-term cases dominate the day-to-day make up of the caseload, this sample under-represents the segment of the aid population that received welfare for short periods of time.

PUMS data was used to create a sample of women who had both public assistance and earned income in 1989 and to look at their earned income for that year. This means that the PUMS sample is less of a "snapshot" and somewhat more of a longitudinal group. However, a comparison of hours typically worked per week in 1989 to hours worked in the week preceding the 1990 Census did not indicate that many of these individuals were upwardly mobile in the labor market.

Even if the best possible earnings profile is attributed to CWPDP participants by looking at the high point of earnings at the end of the program, it still appears that the PUMS sample reported earnings five times greater than that shown for the CWPDP participants.

This comparison is made by taking quarterly earnings of CWPDP participants in Los Angeles County from July 1994 through June 1995 (the final twelve months of the period covered by the report and an interval when approximately 28% were off aid). The four-quarter earnings of those with jobs was only $1,685 (it is unlikely that all those who worked had jobs all four quarters, so this actually overstates the reported income that can be attributed to individual workers in this sample). The comparison is completed by taking the $6,862 income reported for the PUMS sample in 1989 and multiplying it by a factor of 1.212 to convert it to comparable 1994-95 dollars. The result is an annual average earned income of $8,317 in 1994-1995 dollars for the PUMS sample. This is about five times greater than the highest possible average annual earned income that can be attributed to the CWPDP group based on EDD data. This comparison suggests that as much as 80 percent of the income earned by people who move between work and welfare may be in the underground economy.

[6] For a more complete discussion of transportation and welfare reform see Evelyn Blumenberg and Paul Ong, "Job Accessibility and Welfare Usage: Evidence from Los Angeles," ***The Journal of Policy Analysis and Management***, Fall 1998.

[7] Rosina M. Becerra et al, ***California Work Pays Demonstration Project***, pp. 105-152.

Chapter 4
Comparison of Single Mothers With and Without Aid

An interesting aspect of the Los Angeles County PUMS file is the opportunity it offers to compare characteristics of two similar population groups in 1990: single mothers who were receiving public assistance with those not receiving assistance. Both of these groups of mothers were specifically defined as being female, single, between the ages of 16 and 64, and with children under 18 years of age. The educational attainment, labor force experience, and income of these two similar groups of women are analyzed here. The non-public assistance group was over three times larger than the public assistance group, as shown in Table 2.

Table 2
Labor Market Status of Working-Age Mothers

1990 Census Data from Los Angeles County PUMS File Showing Civilian Labor Force Experience of Single Females Ages 16 to 64, with Own Children Under 18 Receiving and Not Receiving Public Assistance

	Population 16 Years and Over	Civilian Labor Force	Employ-Ment	Unemploy-ment	Unemploy-ment Rate	Percent Not in CLF
Public Assistance	52,432	15,475	8,458	7,017	45.3	70.5
No Public Assistance	168,593	135,202	125,247	9,955	7.4	19.8

A fundamental difference between the two groups of single mothers was their relative educational attainment, as shown in Table 3 and Figure 10. Of the group not receiving public assistance, only one-third did not have a high-school diploma or its equivalent, while among those receiving aid over half had not completed high school. About 44 percent of the non-recipients had at least some college-level education, while only half that proportion of mothers receiving assistance had attended college.

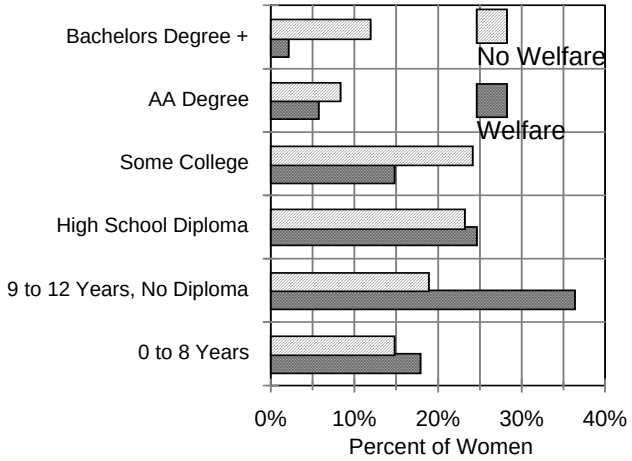
The labor force experience of most workers is strongly correlated with their educational attainment levels. While special barriers experienced by some single mothers wishing to work may set them apart from the rest of the labor force, the educational levels of each group appear to affect their success in finding and keeping a job. Only about 30 percent of the PUMS single mothers receiving public aid were participating in the labor force in 1990 -- that is, either working or actively looking for work. A full 80 percent of the non-recipient mothers were active in the labor force. A vast difference between these two

Table 3
Educational Attainment of Single Female Parents with Children Under 18
1990 Census Data from Los Angeles County Pums File

Educational Attainment	Receiving Public Assistance		Not Receiving Public Assistance	
	Number Of Persons	Percent of Total	Number of Persons	Percent of Total
Total	52,844	100	169,652	100
0 to 8	9,393	17.8	24,521	14.5
9 to 12, no diploma	19,118	36.2	31,748	18.7
High School diploma or equivalent	12,889	24.4	39,118	23.1
Some college, no degree	7,676	14.5	40,483	23.9
Associate degree, occupational program	1,783	3.4	6,135	3.6
Assoc. degree, academic program	1,042	2	7,597	4.5
Bachelors degree	701	1.3	13,270	7.8
Masters degree	104	0.2	4,306	2.5
Professional degree	104	0.2	4,899	1.1
Doctorate degree	34	0.1	575	0.3

groups is also evident among those who did participate in the work force. Nearly half, or 45.3 percent, of all mothers receiving aid who were in the labor force were unemployed, compared with a jobless rate among the non-aid group of 7.4 percent – nearly identical to the unemployment rate for the entire workforce of Los Angeles County in the 1990 Census. Only 16 percent of the aid recipients were employed, while three-fourths of the non-aid group worked at the time of the 1990 Census.

Figure 10
EDUCATIONAL ATTAINMENT-SINGLE MOTHERS
With & Without Public Assistance LA Co



The PUMS data identifies occupations of those reporting work experience any time prior to the Census (whether or not these respondents were active in the labor force at the time they were surveyed). Forty-nine occupations accounted for two-thirds of aid recipients with at least some work experience. Looking at these 49 occupations employing the most

Table 4
Unemployment Rates of Mothers With and Without Aid

1990 Census Data from Los Angeles County PUMS File, Females Aged 16 and Over Who Reported a Primary Occupation, with Own Children Under 18, Not Married: Receiving Public Assistance and Not Receiving Assistance
49 Largest Occupations of Recipients Sorted in Descending Order by Number of Persons in Labor Force

Census Code	Occupational Title	Unemployment Rate: No Public Assistance	Unemployment Rate: Public Assistance
	Total	7.3	31.5
17	Managers, food serving and	1.4	.
22	Managers and administrators	4.9	7.8
95	Registered nurses	0.6	22.5
156	Teachers, elementary school	1.4	11.9
243	Supervisors and proprietors	6.9	46.5
259	Sales representatives, wholesale	5.9	48.8
264	Sales workers, apparel	10.5	25.2
274	Sales workers, other commodities	13.7	47
276	Cashiers	18.6	42.3
308	Computer operators	4.6	46.2
313	Secretaries	3.3	15.9
315	Typists	8.4	41.5
319	Receptionists	8.2	20.6
335	File clerks	20	37.5
337	Bookkeepers and accounting clerks	5.5	36.1
348	Telephone operators	7.2	34.1
364	Traffic, shipping, and receiving clerks	14.5	57.9
365	Stock and inventory clerks	8.5	18.2
379	General office clerks	5.1	27.5
383	Bank tellers	7.6	35.4
385	Data-entry keyers	5.6	36.4
389	Administrative support occupations	0.8	38.2
407	Private household cleaners	8.8	27.7
426	Guards and police, exc. Public	6.8	39.5
435	Waiters and waitresses	9.8	37.9
436	Cooks	14.8	29.9
444	Miscellaneous food preparation	8.7	42.7
447	Nursing aides, orderlies, assistants	5.3	41.2
449	Maids and housemen	6.7	9.9
453	Janitors and cleaners	12.1	39.5
458	Hairdressers and cosmetologists	2.5	5.1
466	Family child care providers	7.6	22.1
467	Early childhood teacher's assistants	4.4	17.5
505	Automobile mechanics	47.3	.
567	Carpenters	100	100
628	Supervisors, production occupations	.	4.7
744	Textile sewing machine operators	10.8	22.5
754	Packaging and filling machine ops.	11.1	35.3
777	Miscellaneous machine operators	9.3	.
779	Machine operators, not specified	16.7	39.1
785	Assemblers	8.7	17.8
796	Production inspectors, checkers	5.3	48.7
804	Truck drivers	13.1	18
808	Bus drivers	2.1	64.3
869	Construction laborers	17.6	.
877	Stock handlers and baggers	.	59.1
883	Freight, stock, and material handlers	.	78
888	Hand packers and packagers	17.2	69.1
889	Laborers, except construction	9.6	30.7

aid recipients (shown in Table 4), the comparative unemployment rates for recipients and non-recipients were 31.5 percent and 7.3 percent, respectively. In most cases, the unemployment rate for the public assistance recipients was some multiple of the rate for the non-aid group within the same job category.

In addition to their educational levels, the ability of single mothers to find and hold a job is affected by access to childcare, convenient and dependable transportation, and English-speaking ability. These factors are addressed more fully in Chapter 9, but income levels indirectly provide a picture of how lack of supportive services may affect labor force success and the standard of living in families headed by single mothers.

Household Income of Single Mothers With and Without Aid

The financial situation of single mothers receiving aid is illuminated by comparing the total income of women on and off aid as well as the total income of their households. To ensure the sample used for this analysis would be comparable to AFDC-FG households, mothers with disabilities preventing them from work and families in which an unmarried partner of the mother was present were excluded from the analysis. (See more detailed tables for the following analysis in the Appendix.)

Wages and salaries provided 85 percent of the income earned by single mothers not receiving aid. For aid recipients, public grants accounted for 84 percent of all income received. However, the overall average-annual income received by non-recipients was double that for those receiving aid. Non-aid mothers received $18,352 during 1989, while aid recipients averaged $9,128. The distribution of income by income level was also different for these two groups. For recipients of aid, 80 percent had annual incomes below $15,000, compared to 50 percent for the non-aid group. While 38 percent of mothers without aid had incomes of $20,000 or more, only 5.8 percent of mothers receiving aid had incomes that high.

Another way of examining the financial status of single mothers receiving aid compared to those not receiving aid would be to aggregate the income of all adults in the households of each group. The overall average income of both groups increased substantially by including other household members, but the other members of non-aid households added two-and-one-half times more dollars than other members in aided households. Recipient average household income, at $17,030, was only slightly more than half the average of non-aid households with single mothers, as shown in Table 6. While 43 percent of all households with a single mother receiving aid had incomes below $15,000 in 1989, only 20 percent of the non-aid households were in this category. Of single-mother households receiving aid, only 32 percent had an income of $20,000 or more, while 71 percent of non-aid households were in this group, or 1.7 times the share of the public-aid group.

Table 5

Incomes of Women With and Without Aid

1990 Census Data from the Los Angeles County PUMS File
Showing Average Distribution of Income in 1989 Single Female Parents
with Own Children Under 18 Present in Home

Income Group	Pct. Of Total		Average Income in 1989		Avg. Pct. Income from Earnings		Avg. Pct. Income Public Assist.		Avg. Pct. Income Other Sources	
	Aid	No Aid	Aid	No Aid	Aid	No Aid	Aid	No Aid	Aid	No Aid
Total	100.0	100.0	$9,128	$18,352	14.3	85.1	83.7	0.0	2.0	14.9
None	0.0	12.0	0	$0	0.0	0.0	0.0	0.0	0.0	0.0
$1 to $4,999	19.3	8.6	$2,252	$2,359	8.8	74.6	89.4	0.0	1.8	25.4
$5,000 to $9,999	53.6	14.8	$7,709	$7,411	6.9	75.6	92.2	0.0	0.9	24.4
$10,000 to $14,999	7.7	14.7	$12,152	$12,028	50.2	89.1	44.8	0.0	5.0	10.9
$15,000 to $19,999	13.7	11.7	$15,754	$17,002	15.6	91.5	81.9	0.0	2.5	8.5
$20,000 to $29,999	3.3	19.0	$24,353	$24,081	64.7	91.0	29.1	0.0	6.2	9.0
$30,000 to $49,999	2.2	15.3	$36,800	$36,800	70.0	88.1	20.4	0.0	9.6	11.9
$50,000 and over	0.3	3.9	$59,740	$76,905	47.3	74.4	17.9	0.0	34.8	25.6

Table 6

Total Household Incomes of Women With and Without Aid

1990 Census Data from the Los Angeles County PUMS File
Showing Average Distribution of Total Income in 1989 for all People in
Households of Single Female Parents with Own Children Under 18 Present in Home

Income Group	Pct. Of Total		Average Income In 1989		Avg. Pct. Income From Earnings		Avg. Pct. Income Public Assist.		Avg. Pct. Income Other Sources	
	Aid	No Aid	Aid	No Aid	Aid	No Aid	Aid	No Aid	Aid	No Aid
Total	100.0	100.0	$17,225	$32,625	28.1	84.6	67.0	0.0	4.9	15.4
None	0.0	0.0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
$1 to $4,999	9.7	3.1	$2,101	$2,407	9.9	67.9	87.5	0.0	2.6	32.1
$5,000 to $9,999	29.8	6.0	$7,835	$7,587	7.5	69.7	91.3	0.0	1.2	30.3
$10,000 to $14,999	10.1	7.8	$12,446	$12,255	40.4	83.3	51.9	0.0	7.7	16.7
$15,000 to $19,999	18.0	8.8	$16,447	$17,248	24.1	87.4	70.9	0.0	5.0	12.6
$20,000 to $29,999	11.8	17.2	$24,683	$24,464	53.6	88.7	35.5	0.0	10.9	11.3
$30,000 to $49,999	12.7	25.6	$38,574	$38,032	68.8	88.0	21.6	0.0	9.6	12.0
$50,000 and over	7.8	28.6	$72,004	$76,715	77.1	84.9	11.4	0.0	11.5	15.1

There was a significant difference observable between the incomes of adults other than the single mothers in the households of each group. For non-assistance households, the incomes of the other adults averaged 37 percent higher than for their counterparts in the aid-recipient households. Moreover, while less than half of these adults in recipient households had incomes of $20,000 or more, 60 percent of other adults in non-aid households were in that income category. However, even more important was the fact

Figure 11
SUPPORT FROM OTHER HOUSEHOLD MEMBERS
Single Mothers with Children-LA County

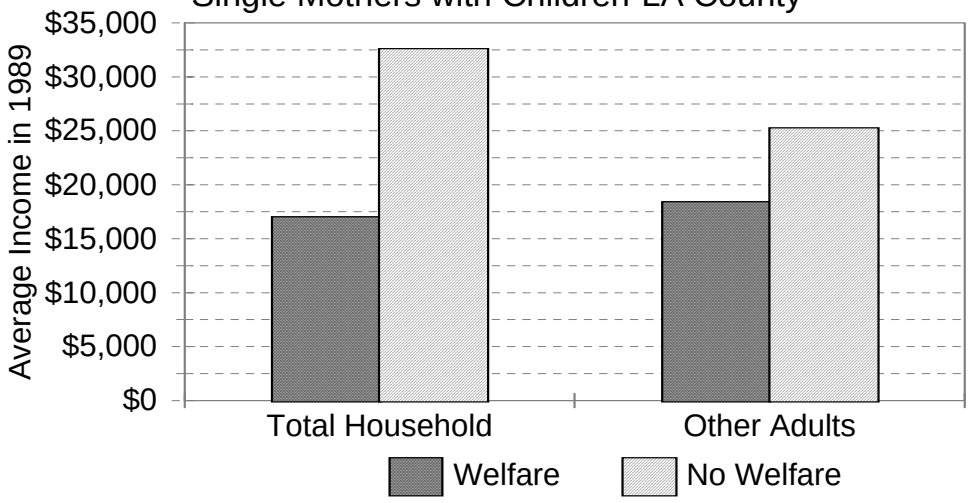


Table 7
Incomes of Other Adults in Households of Single Mothers
1990 Census Data from the Los Angeles County PUMS File, Showing
Average Distribution of Income in 1989 for Other Adults in the Households
of Single Female Parents (records showing husband or unmarried partner excluded)

Income Group	Pct. of Adults: Aid	Pct. of Adults: No Aid	Average Income In 1989: Aid	Average Income In 1989: No Aid	Avg. Pct. Inc. from Earnings: Aid	Avg. Pct. Inc. from Earnings: No Aid	Avg. Pct. Inc. from Pub. Asst.: Aid	Avg. Pct. Inc. from Pub. Asst.: No Aid	Avg. Pct. Inc. from Other Sources: Aid	Avg. Pct. Inc. from Other Sources: No Aid
Total	100.0	100.0	$18,423	$25,266	69.9	83.3	12.7	0.0	17.4	16.7
None	9.6	8.0	$0	$0	0.0	0.0	0.0	0.0	0.0	0.0
$1 to $4,999	8.8	7.5	$2,242	$2,484	65.1	77.7	16.4	0.0	18.5	22.3
$5,000 to $9,999	13.1	7.6	$7,262	$7,368	47.6	74.5	28.5	0.0	23.9	25.5
$10,000 to $14,999	10.4	9.0	$12,233	$12,048	67.5	80.7	10.8	0.0	21.7	19.3
$15,000 to $19,999	9.9	8.1	$16,988	$17,065	75.6	85.0	9.3	0.0	15.1	15.0
$20,000 to $29,999	17.1	15.8	$24,563	$24,152	81.9	86.3	7.0	0.0	11.1	13.7
$30,000 to $49,999	18.9	21.6	$38,482	$38,487	82.5	88.4	3.7	0.0	13.8	11.6
$50,000 and over	12.3	22.3	$74,200	$76,917	84.4	86.0	2.0	0.0	13.6	14.0

that the number of adults in non-aided households was 60 percent greater than the number of adults in those households where a single mother received public assistance.

The picture that emerges of the two groups of single mothers may provide some answers to the question of why some rely on public assistance income, and others in nominally similar circumstances do not. Education probably plays an important part in the ability of

single mothers to participate successfully in the labor force. There is a wide difference in educational levels between the two groups. The higher educational attainment of those not receiving aid would most likely also account for their higher earnings.

On the other hand, not all non-aid mothers had earnings that would allow them to adequately support a family. Half of this group earned less than $15,000 a year, and 12 percent had no income at all. This group of mothers not receiving public aid was, in terms of income and attachment to the labor force, not very different from their counterparts among public assistance families.

These findings suggest that a principal difference between many low-income single mothers surviving without aid and those receiving aid is assistance from other household members (see Figure 11) as well as help from parents and child support from their children's fathers. Evidence from household income data also suggests that a large number of single mothers not receiving public assistance live in households where there is not only substantially more income from the other adults present, but also more access to transportation and child-care services than their non-public-aid counterparts have.

Summary of Findings

- A fundamental difference between single mothers who are aid recipients and those who are non-recipients is their educational attainment. Among non-recipients, only one-third do not have a high-school diploma, while among those receiving aid over half had not completed high school. About 44 percent of the non-recipients had at least some college-level education, while only half as many mothers receiving assistance had attended college.

- Only about 30 percent of single mothers receiving public aid were participating in the labor force in 1990 -- that is, either working or actively looking for work. A full 80 percent of non-recipient mothers were active in the labor force

- Only 16 percent of the aid recipients were employed, while three-fourths of the non-aid group worked at the time of the 1990 Census.

- Over 85 percent of the income of single mothers not receiving aid comes from their jobs, while for aid recipients over 84 percent of their income comes from public grants. The overall average-annual income received by non-recipients is double that of those receiving aid.

- A principal difference between many low-income single mothers surviving without aid and those receiving aid is the level of financial assistance they receive from other household members. The additional adults in non-aided households not only tended to have higher incomes, but there were more of them per household with incomes compared to households with public assistance.

Chapter 5
Work-Readiness Groups Among Aid Recipients

The central question raised by impending welfare reform is, what works for moving very poor people into steady employment? Are recipients "slackers" needing tough love to shape up and be responsible? Are they demoralized, needing encouragement and pointers on how to find a job? Are they experiencing financial emergencies and in need of a helping hand while they get back on their feet? Do they lack the necessary education and skills to compete in the workplace and need training? Are they casualties of a social and economic system that gives some people a very poor chance in life and therefore owes them asylum? All of these perspectives can be heard in discussions about welfare reform that are all too frequently rhetorical. A look at actual characteristics of different work-readiness groups within the welfare caseload provides a practical basis for designing programs that will help welfare recipients survive in the labor market.

The PUMS sample representing single welfare mothers (2,474 records representing 52,256 unmarried women 18 to 64 years old without disabilities who received public assistance and had children under 18) was divided into three groups with differing levels of employability[1]:

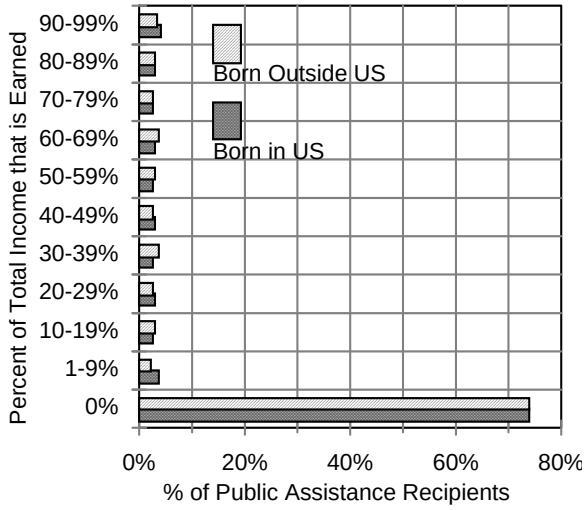
- The group with ***significant earnings*** had the strongest labor market connections. These women were employed and earned at least 50 percent of the combined total of earnings and public assistance income in 1989, or at least $2,400 ($3,210 in 1998 dollars). This group included roughly one-fifth of all aid recipients.

- The group that had ***recently worked*** represented an intermediate level of risk. These women had worked in the past 27 months but depended on public assistance for most or all of their income. This group included roughly one-fifth of all aid recipients.

- The group of ***long-term unemployed*** represented women with the greatest barriers to employment. If they had worked it was before 1988; and roughly 40 percent had never worked. This group included about three-fifths of aid recipients.

In the following analysis each of these three work-readiness groups is further divided into two subgroups: aid recipients born inside the United States, and those born abroad. Recipients born inside the U.S. made up roughly two-thirds of the sample, and those born abroad one-third. This subsample of foreign-born aid recipients is significant because many immigrants were raised and educated in societies where the level of education one receives is more reflective of social class than academic merit, and where cultural expec-

Figure 12
PERCENT OF TOTAL INCOME THAT IS EARNED
Women Born Inside & Outside the US



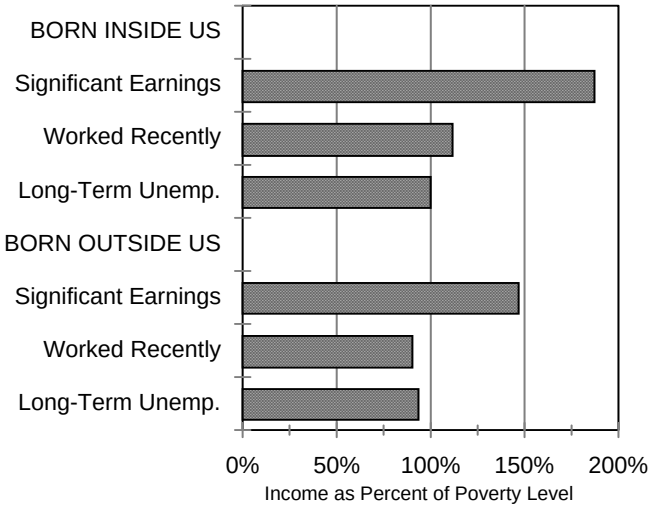
tations lean toward larger families and more closely knit family networks. By viewing data for recipients born inside the U.S. and those born elsewhere separately, the barriers to employment faced by each group become more clearly identifiable.

Income

On the surface, aid recipients born inside the U.S. and those born abroad appear to have similar earnings characteristics. A profile comparing women born inside the United States to those born abroad in terms of the percent of their total 1989 income that they earned is shown in Figure 12. Total income included earnings from employment and public assistance. There is a uniform but small percent of recipients in each earnings cohort, with 26 percent of women earning some portion of their income and 74 percent obtaining all of their income that year from aid. At this level, native and immigrant aid recipients are indistinguishable.

Total income from all sources as a percent of the poverty level is shown in Figure 13. The most job-ready recipients -- those with significant earnings -- enjoy a much wider margin of safety from poverty than other recipients. Furthermore, recipients born in the U.S. tend to be farther removed from poverty than those born abroad. Recipients born abroad may tend to be closer to poverty because rearing more children (shown later) spreads their income more thinly, and also because noncitizen parents are ineligible for aid.

Figure 13
TOTAL INCOME AS % OF POVERTY LEVEL
Work Readiness Groups - LA County

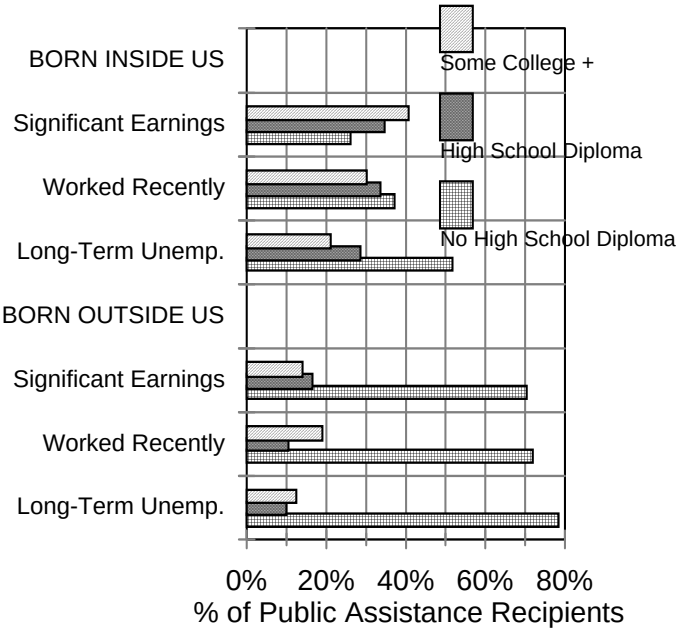


When hours worked and earnings per hour of women with significant earnings are examined, the differences between the two groups become greatest. Of women having significant earnings, those born in the U.S. worked an average of 1,200 hours in 1989, and those born abroad worked an average 1,281 hours. The average annual earnings of those born in the U.S. was $9,955 or $8.30 per hour, and the average earnings of those born abroad was $8,063 or $6.30 per hour. In summary, those born abroad tend to work more hours at about three-quarters the hourly wage and for about four-fifths the annual income of their U.S.-born counterparts.

Figure 14

WORK READINESS AND EDUCATION

Women Born Inside and Outside the US



Education, Language, and Immigration

Among recipients born in the U.S., higher levels of education are strongly associated with better labor market connections. As shown in Figure 14, more people with college education and fewer people without high school diplomas are found among those with significant earnings. Those who had recent work histories but lacked significant earnings showed lower levels of college attendance and were less likely to have obtained a high school diploma. Moreover, the long-term unemployed, including those who had never worked at all, showed the lowest levels of college attendance and the greatest likelihood of failing to graduate from high school. Successful employment tends to be associated with college experience, and labor market disconnection tends to be associated with absence of a high school diploma. Although the absence of a high school diploma tends to be a predictor of unemployment, possession of a diploma is a much weaker predictor of employment than is college education.

Recipients born outside the U.S. were much more likely to lack a high school diploma than their native-born counterparts, and college education was not strongly associated with employment. Foreign-born individuals with a high school diploma were somewhat more likely to be employed than those without a diploma, but education was a weak predictor of

Figure 15
WORK READINESS AND ENGLISH ABILITY
Women Born Outside the US

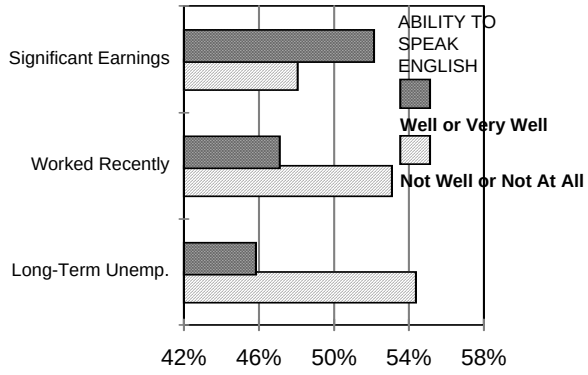


Figure 16
SIGNIFICANT EARNINGS - YEAR IMMIGRATED
Recipients Born Outside the US

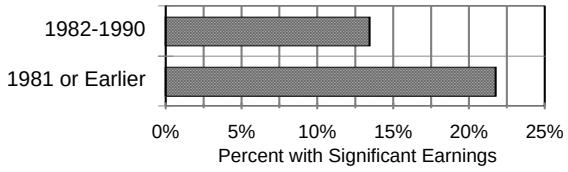
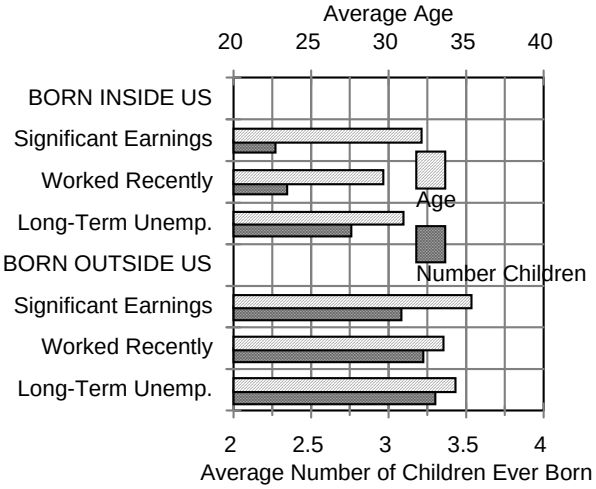


Figure 17
AVERAGE AGE AND NUMBER CHILDREN
Women Born In and Outside the US



employment among immigrant aid recipients. This may well be because many immigrants are strongly motivated individuals who did not have educational opportunities in their homelands but who bring to their work the same drive and ability to learn found among their better-educated, native-born counterparts.

The ability among immigrants to speak English well or very well is positively associated with having significant earnings. Immigrants who spoke English not well or not at all were more likely to lack significant earnings or even a recent work history, as shown in Figure 15. Three-quarters of the women in this subsample of aid recipients who were born abroad spoke Spanish at home, and an additional 12 percent spoke a language other than English at home. This reflects the reality that mastery of English is a task many immigrant aid recipients must take on as adult learners. Immigrants who had been in the U.S. more than eight years were more likely to have significant earnings than more recent arrivals, as shown in Figure 16. This may well be the outcome of having acquired English skills, local work experience, and attachment to social networks that support provide access to jobs and childcare services.

Age and Number of Children

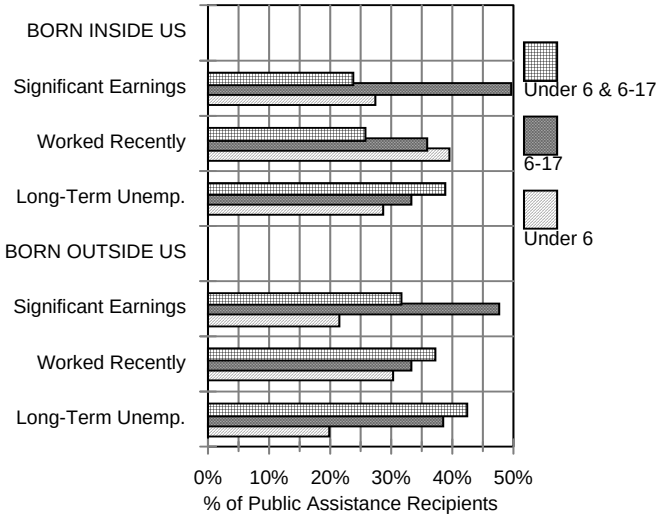
Among women born in the United States, higher levels of earned income tended to be associated with

having fewer children and greater age, as shown in Figure 17. Aid recipients born abroad tended to be older and have more children. While the pattern of fewer children and greater age holds true among those with significant earnings in both groups, this pattern is weaker among women born outside the U.S.

Figure 18

EARNINGS BY AGE OF CHILDREN

Women Receiving Welfare - LA Co. 1990



Women with significant earnings were most likely to have children that were all school-age, and less likely to have children under six years of age, as shown in Figure 18. This was true regardless of those women's place of birth. Similarly, women with recent work histories but who lacked significant earnings were more likely to have preschool children, and women whose work histories were further in the past were more likely to have both preschoolers and school age children. The need to care for young children clearly tends to be at odds with maintaining strong labor market connections among poor women.

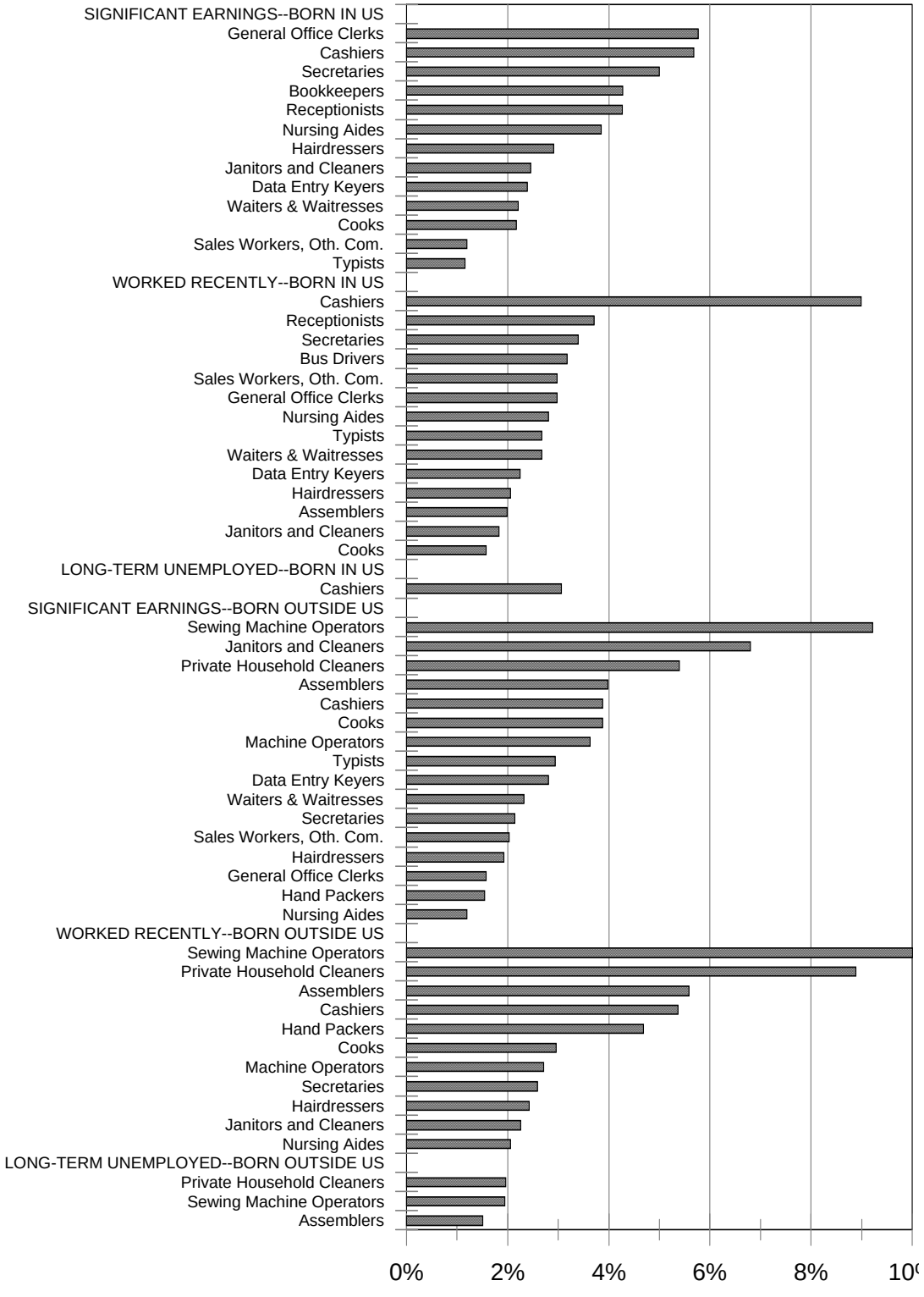
Largest Occupations of Work Readiness Groups

The occupations that accounted for the most employment within each work-readiness group are shown in Figure 19. Aid recipients born in the U.S. were concentrated in clerical occupations (clerks, cashiers, secretaries, bookkeepers, receptionists, and data entry keyers) which accounted for 27 percent of employment among those with significant earnings. Aid recipients born abroad were concentrated in sewing and cleaning occupations (sewing machine operators, janitors and cleaners, and private household cleaners) which accounted for 21 percent of employment among those with significant earnings. There is relatively little cross-over of aid groups into these two clusters, perhaps because clerical occupations often require English skills found most readily among native-born recipients, and cleaning and sewing occupations call for a willingness to work long hours at low pay found most often among immigrants struggling for survival.

Occupations held by aid recipients with significant earnings in each place-of-birth cohort also show up as the primary occupations of individuals with weaker labor market connections in each cohort. This suggests two possible conclusions:

Figure 19

JOBS HELD BY EACH WORK-READINESS GROUP



1. For most aid recipients in each place-of-birth cohort, higher earnings tend to result from working more hours rather than from reaching higher rungs of the labor market. Access to more working hours may result from stronger labor market qualifications, such as more education, as well as reduced childcare pressures.

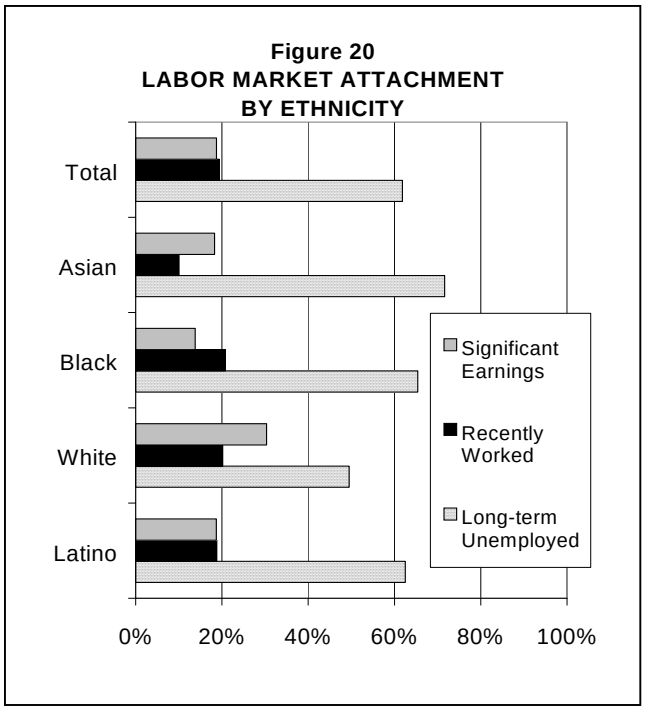
2. There appears to be an over-supply of labor in the occupations in which most recipients are employed. Large numbers of out-of-work recipients are "waiting in the wings" for jobs already filled by other recipients. This issue is explored further in the next chapter.

Immigrants are often viewed as exemplary hard workers – taking whatever jobs they can find, including cleaning buildings and sewing garments for substandard wages. The suggestion has been made that native-born welfare recipients need to demonstrate similar industriousness. The interests of the Los Angeles region are better served by understanding that labor market reference points for immigrant workers are set in developing countries they left, often through arduous efforts, to find a better life in the United States.

If low-paid sewing and cleaning jobs in Los Angeles support a higher standard of living than work available in the immigrant's home country, there is economic justification for staying here. But if a growing segment of the Los Angeles economy is characterized by labor market conditions barely better than those in developing countries, it is inevitable that increasing numbers of local communities will share the blight, over-crowding, lack of public amenities, and destitution that characterize developing countries, and that were common in big U.S. industrial cities up until World War II. It is important for the entire Los Angeles region as well as aid recipients that welfare reform programs help people on aid qualify for and hold decent jobs, rather than merely increase competition for marginal jobs that do not enable even those who have them to move out of poverty.

Profile of Aid Recipients by Ethnicity

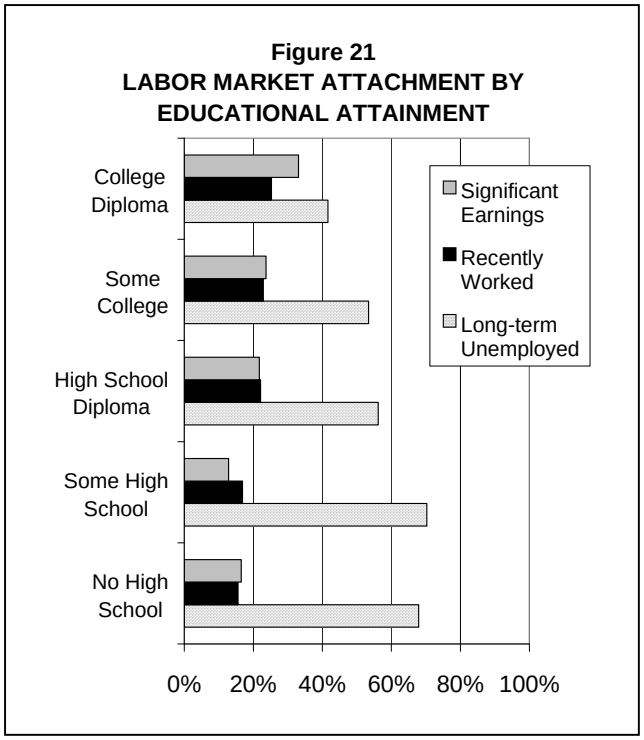
An ethnicity profile of single mothers receiving aid illuminates significant variation in the job-related needs of different ethnic communities. Four in five single mothers receiving aid at the time of the Census were Latina[2] or Black. The PUMS data showed 43 percent to be Latina, 37 percent Black, 16 percent White, and 4 percent Asian. (A more accurate breakout of recipients by ethnicity is probably provided by the Work Pays data, which shows the county's AFDC-FG population to be 53 percent Latina, 32 percent Black, 15 percent White, and 5 percent Asian[3].) Compared to their proportion of the Los Angeles County workforce, Blacks are greatly over-represented among welfare recipients. Whites and Asians are under-represented. The Latina share of recipients is about the same as their share of the total workforce.



There is a correlation between labor market outcomes and ethnicity, as shown in Figure 20. White aid recipients had the highest earnings, while Blacks, Latinas, and Asians had lower earnings and higher levels of long-term unemployment.

A majority (53 percent) of single mothers receiving aid did not have a high school diploma or its equivalent. Three in four Latinas did not have a high school diploma, while 2 in 3 Blacks and Whites had obtained at least a high school diploma.

Mothers with a high school diploma or some college education had significantly higher earnings and better work histories than those who had not completed high school, as shown in Figure 21. The relationship between education and earnings is even stronger for individuals born in the U.S (see Figure 14). Almost half of the women in this sample had attained at least a high school diploma or its equivalent, although only 7 percent had received a college degree. Of those women who had obtained a high school diploma, 24 percent had significant earnings, compared to 14 percent of those without a high school diploma. Seventy percent of women without a high school diploma were long-term unemployed, compared to 53 percent of those with a diploma. Among women with a college degree, one-third had significant earnings, but 42 percent were among the long-term unemployed.

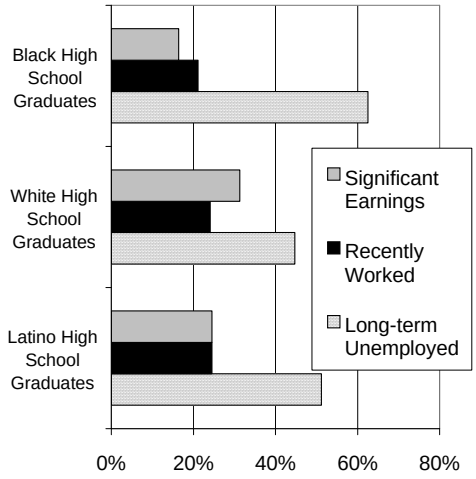


Women with at least a high school diploma were twice as likely to be

currently employed as women who had not finished high school.

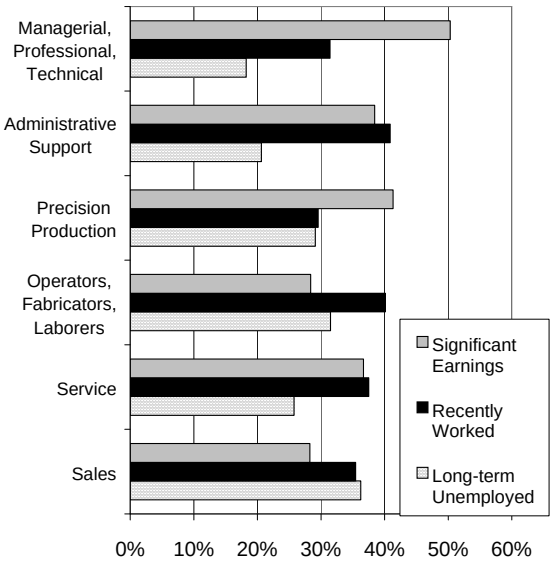
Whites and Latinas benefited more (in terms of earnings) from a high school education than did Blacks. Figure 22 shows the labor market status of women with just a high school diploma. While 31 percent of White high school graduates and 25 percent of Latina high school graduates had significant earnings, only 16 percent of Black high school graduates did. Sixty-three percent of Black high school graduates had not worked recently, compared to 51 percent of Latina high school graduates and 45 percent of White high school graduates.

Figure 22
LABOR MARKET ATTACHMENT OF HIGH SCHOOL GRADUATES BY ETHNICITY



Of the single mothers in this Census sample, fifty-nine percent identified a specific occupation as their field of work. The largest number of women worked in administrative support occupations (29 percent), followed by service occupations (23 percent), operators, fabricators, and laborers (18 percent), sales (14 percent), managerial, professional, and technical occupations (12 percent), and precision production occupations (4 percent).

Figure 23
LABOR MARKET ATTACHMENT BY OCCUPATION



Managerial, professional, and technical workers had the strongest job connection, as shown in Figure 23. One-half of these workers had significant earnings, as did 41 percent of precision production workers, 38 percent of administrative support workers, and 37 percent of service workers. Occupations with the highest concentration of long-term unemployed were sales, operators, fabricators, and laborers.

Although White women and persons with a high school education fared better than others, most worked in low-wage, insecure jobs, as cashiers, food service workers, cleaners, assemblers, and sewing machine operators. In a significant segment of this low-wage job market workers are cycled between jobs and bouts of unemployment.

Language Other Than English

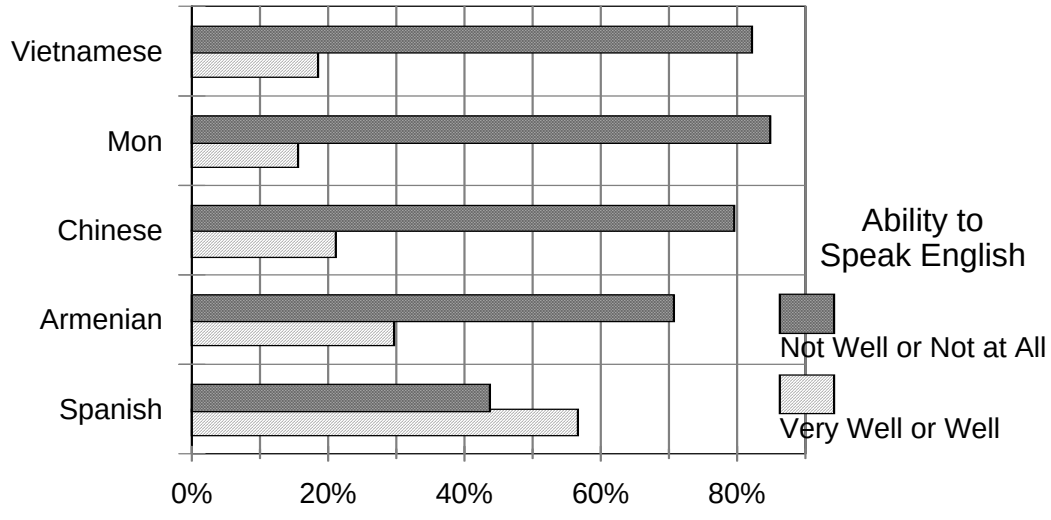
Forty-eight percent of mothers receiving aid in Los Angeles County speak a language other than English at home, based on 1990 Census data. Two-thirds of these women, or 33 percent of all mothers, speak Spanish at home, 3 percent speak Armenian, 3 percent speak Mon, 3 percent speak Chinese, and 2 percent speak Vietnamese. Of women speaking a language other than English at home:

- 30 percent spoke English very well
- 19 percent spoke English well
- 33 percent did not speak English well
- 18 percent did not speak English at all

A distribution of AFDC women by English-speaking ability and language group is shown in Figure 24. Women who did not speak English well had weaker labor market connections than their counterparts who spoke English well. When they found jobs, women with little or no English speaking ability were more likely to work as cleaners or sewing machine operators.

Figure 24

ENGLISH SPEAKING ABILITY - AFDC WOMEN WHOSE HOME LANGUAGE IS NOT ENGLISH



Summary of Findings

- Census data suggest that about one-fifth of the county's caseload of single mothers were employed at the time of the Census and had significant earnings, indicating viable prospects for economic self-sufficiency; another fifth were employed or had been employed in the past two years, but did not have significant earnings, indicating intermediate prospects for self-sufficiency; and about three-fifths had not worked recently or had never worked, indicating difficult prospects for self-sufficiency.

- Within each risk group, recipients born in the United States were further removed from poverty than those born abroad.

- Those born abroad tended to work more hours at about three-quarters the hourly wage and for about four-fifths the average annual income of their U.S.-born counterparts.

- Among recipients born in the U.S., higher levels of education were strongly associated with better labor market connections. The connection between education and successful employment was much weaker among recipients born abroad, most of whom lacked high school diplomas.

- The ability to speak English well or very well and eight or more years spent in the United States were predictors of stronger labor market connections among recipients born abroad.

- Within each ethnic group, mothers with at least a high school diploma had stronger labor market attachments than those without a high school diploma. However, Whites and Latinas benefited more from a high school education than did Blacks. Among women with just a high school diploma, 31 percent of Whites, 25 percent of Latinas, and only 16 percent of Black had significant earnings.

- Forty-eight percent of mothers receiving aid in Los Angeles County spoke a language other than English at home. Women with little or no English speaking ability had weak labor market connections, and when they found jobs it was most likely as cleaners or sewing machine operators.

- Women in their early to mid-thirties who had relatively few children (approximately two if born in the U.S., three if born abroad) tended to have stronger labor market connections than younger women with more children. Similarly, mothers whose children are all at least school age had stronger employment connections than those whose children were under 6 years old.

- Higher earnings among welfare workers tended to be the result of working more hours rather than reaching better-paying occupations than those held by welfare workers with lower earnings, suggesting a ceiling on possible earnings and prospects for self-sufficiency unless workers gain access to better occupations.

- There appears to be an over-supply of labor in occupations employing the most recipients, with large numbers of out-of-work recipients waiting in the wings for jobs already filled by other recipients.

- There was a high level of unemployment among aid recipients in occupations employing the largest number of welfare workers.

- Characteristics that predict improved prospects for employment and economic self-sufficiency, and that can be used to identify groups of aid recipients with different levels of need for training and supportive services, include:

    - Education
    - Ability to speak English
    - Number of children
    - Age of children
    - Work history
    - Length of time since last job
    - Occupation
    - Presence of other adults in the household who contribute income or assistance in caring for children (discussed in previous chapter)

Notes

[1] We are indebted to Yeheskel Hasenfeld for the concept of developing employment strategies based on the level of employability of different groups of aid recipients.

[2] The terms Latino and Latina are used here as equivalent terms for the U.S. Census classification of Hispanic.

[3] Becerra et. al., op. cit., p. 21.

Chapter 6
External Demands on Low Wage Workers [1]

As a result of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), low-income parents are under increased pressure to combine their parental responsibilities with work in the paid labor market. Under PRWORA, a lifetime cap of five years replaces the federal entitlement to cash assistance previously guaranteed to eligible low-income families under the former Aid to Families with Dependent Children (AFDC) program. The new legislation mandates involvement in work-related activities, without any reciprocal federal guarantee of child-care assistance for families with children over 6, and without regard to the educational goals of participants. Families without childcare for even the youngest children, however, still face significant pressure to find employment because the 5 year "clock" continues to run regardless of the age of a recipient's child and regardless of subsequent births to a recipient. Whereas these stricter eligibility criteria reflect an effort to reduce welfare caseloads and increase economic self-sufficiency, the emphasis on mandated work requirements and time-limits over supportive services, education and training, and labor market reform is unlikely to improve the labor market prospects of most welfare recipients.

There are several reasons to question the effectiveness of the new legislation - the first of which might be the manner in which the problem itself has been defined. The emphasis on mandated work, sanctions for noncompliance, and time limits incorrectly suggests that the "welfare problem" is best characterized as one of welfare dependence and idleness. A significant body of empirical literature demonstrates that long-term, continuous welfare dependence is rare -- with Mary Jo Bane and David Ellwood estimating that less than 15 percent of the caseload is on welfare for over 10 years continuously; and that this 15 percent may face significant personal barriers to employment.[2] Whereas tougher requirements may serve to prod these recipients into more active work searches, a combination of limited skills, disabilities, and external demands will limit the income and employment gains among this group.

In addition to the legislation's effect on the small group of long-term, continuously aid-reliant families, its emphasis on behavioral mandates may prove risky and ultimately ineffective for the rest of the welfare population as well. Bane and Ellwood's analysis demonstrates that the majority of welfare recipients are either on the rolls for only a brief period (about 40 percent of recipients collect benefits for a lifetime total of two years or less) or cycle back and forth between welfare and employment over many years. Thus, rather than shunning employment, most welfare recipients are actively engaged in the labor market for significant periods of their lives.

Policy makers, the public, and academics might benefit from asking why it is that despite this considerable involvement in the labor market, many welfare recipients are unable to achieve economic self-sufficiency. In this chapter, we argue that part of the answer lies in the difficulty of combining parenting with work performed outside the home, especially for low-skilled workers. Most welfare recipients find employment in the low-wage labor market, and these jobs seldom offer workplace supports that reconcile the competing demands of motherhood and paid labor. Without such workplace supports, and without adequate resources to purchase private services, even the most stable jobs are likely to be short-lived.

The Reality of the Low Wage Labor Market

In trying to understand the employment difficulties facing low-income parents it is crucial to keep in mind labor market conditions, and how these conditions affect low-skilled workers. According to some labor market economists, demand-side changes have resulted in increasingly poor labor market prospects for low-skilled workers. Compared to earlier periods, the jobs available to low-skilled workers offer lower wages, are more likely to be part-time and temporary, less likely to be unionized, and are increasingly located outside of central cities.[3] Whereas low-skilled men have been particularly affected by this changing labor market, low-skilled women have historically found work in part time, service sector, non-union jobs and, thus, the *new* problems facing low-skilled men are problems poor women have traditionally experienced.

AFDC (now TANF) recipients, who are predominately female and disproportionately low-skilled, have always faced, and continue to face, a labor market that provides limited opportunities for economic self-sufficiency. For example, research conducted by the Institute for Women's Policy Research reports that women who leave welfare for work, or combine welfare with employment are over-represented in clerical, food service, janitorial, and domestic jobs.[4] AFDC recipients in Los Angeles County also prove to be disproportionately represented in these low-wage occupations as well, as earlier chapters of this report illustrate.

As a result of these limited occupational prospects, the earnings of former welfare recipients tend to be quite low. Studies suggest that welfare recipients who exit welfare for work make between $7.00 and $8.00 per hour (in 1996 dollars), and suggest that this hourly wage does not increase significantly over time. For example Kathleen Harris finds, in her analysis of the Panel Study of Income Dynamics data, that welfare recipients who exited welfare between 1983 and 1988 were making hourly wages of $7.78 after the first 12 months, $7.74 after 24 months, and $8.04 after 36 months. Annual earnings are even lower than these hourly wages would suggest (most studies report annual earnings of between $9,000 and $12,000 after a welfare exit) because welfare recipients are unlikely to find work in full-time, year-round jobs.[5]

The economic rewards of these low-skilled jobs are not only limited but also short-lived. The jobs of welfare recipients, as well as those of other workers in the low-wage labor market, are often insecure because employers rely increasingly on a temporary workforce, and because low-skilled workers are often the first casualties during periods of economic uncertainty. The importance of these job-related (rather than worker-related) reasons for job loss were expressed by employers and employees interviewed as part of the *Workplace Environment Study*, a small qualitative study that investigated the experiences of workers in the low-wage labor market in Los Angeles County. For example, a part-time office assistant, interviewed as part of this study, lost her job when the position was eliminated due to funding reductions; another interviewee had been a claims representative for an insurance company until the company folded; and the position of a medical records technician was eliminated when her employer contracted with a different agency to carry out administrative services. These job-related reasons were corroborated by the employers, who also reported that economic concerns, more than individual dissatisfaction with workers, drove decisions to terminate workers.

In the words of the owner of a small grocery store, the " . . . main reason [for terminating employees] is that I cannot keep them. When business is slow my wife or me can do the cashier work." When another employer was asked about the major challenges that he faced in maintaining a productive workforce, his response also pointed to the importance of broader economic indicators: He answered the interviewer's question by stating, "Slow business. First thing you do when business is slow -- you cut down on your people."[6]

As Los Angeles County expands its efforts to move welfare recipients into the workforce *and keep them there*, it may be helpful to consider how labor market conditions affect the prospects welfare recipients have for stable work and economic self-sufficiency. The low-skilled labor market provides job opportunities that are disproportionately low-wage, part time, and temporary; and the low-skilled workforce is particularly at risk during periods of economic uncertainty. Yet, the new welfare legislation, with its emphasis on work over education and training and the imposition of time-limits on welfare receipt, characterizes the problem as one of an unwillingness or unreadiness to work on the side of the recipient, with little regard to the shortcomings of the market itself.

Competing Demands of Poverty, Motherhood, and Paid Labor

In addition to demand-side factors that limit a job's quality and stability, workers in these jobs must often manage multiple demands that further complicate their employment experiences. Low-income parents are disproportionately burdened by a variety of stressors such as insecure housing arrangements, inadequate transportation and childcare, health problems, worries over unpaid bills, and a variety of other economic stressors. These stressors can interfere with a person's ability to meet workplace demands,

especially in work settings that require inflexible hours, and for workers who have little autonomy or control over the manner in which they complete their job tasks.

Transportation issues may be particularly problematic for low-income parents, who rely disproportionately on public transportation or the help of friends and family members to get to and from work. Previous research suggests that car ownership significantly increases a welfare recipient's likelihood of being employed.[7] The relationship between automobile access and employment may be particularly significant in areas with inadequate public transportation systems. Yet welfare regulations have made it difficult for welfare recipients to own cars because of the stringent restrictions on earnings and assets operating in most states. In the *Workplace Environment Study*, 40 percent of respondents reported that they did not drive a personal automobile to work. In part because of this limited automobile access, several respondents reported transportation-related barriers that resulted in problems getting to work reliably. Respondents who held jobs with early-morning or evening hours, or who did not have predictable work schedules were most likely to report transportation-related problems. One respondent, for example, reported that she had declined early-morning job assignments from the temporary agency where she worked because she was completely dependent on public transportation (which did not operate before 6:00 in the morning).[8]

Perhaps of greatest concern to low-income working parents is finding and keeping adequate childcare arrangements for their children. Because formal day care center services are unaffordable to most poor families, low-income parents use predominately informal care arrangements for their children.[9] The Institute for Women's Policy Research (IWPR) reports that welfare recipients are even more likely than other poor single mothers to rely on informal care. The prominence of informal care arrangements was evident in the *Workplace Environment Study* as well. Less than one-fourth of the respondents interviewed in this study utilized formal center care or formal after-school programs. Instead, the vast majority of respondents relied on informal network members, most often mothers and other female relatives, to care for their children either in their own home or the home of the caregiver. Fifteen percent of the sample reported no regular childcare provider. For these women, care arrangements were pieced together at the last minute, or in some cases, children were left home with no care arrangements in place.[10]

One of the respondents in the *Workplace Environment Study*, Gretchen, was unable to locate childcare for her 10-year old son after finding work as a neighborhood patrol officer for a private security company. Gretchen reports that she lost both her welfare benefits and the childcare subsidy that had accompanied them when she accepted the security job. As a result, she could not afford to purchase formal childcare. Because Gretchen did not have family or friends nearby who could provide informal care, she reported leaving her son at home alone during her evening shifts. She prohibited her son from leaving the house or answering the phone or door during her absence, but she also reported her concern about the safety of such an arrangement. Gretchen patrolled in a car

by herself, a situation that allowed her the freedom to drive home periodically and check on her son (outside of her boss' awareness). This arrangement was not one that left Gretchen satisfied however -- both for fear of her son's safety and because she preferred spending time with him during the evenings when he was not at school.

The respondents in the *Workplace Environment Study* who had successfully arranged childcare reported using the arrangements they did for both financial and safety reasons; but for many, the arrangement chosen was the only option available. Over 40 percent of the respondents reporting regular care also reported not having an alternative source of childcare, and stated that it would be either unlikely or very unlikely for them to find a childcare replacement in the event that their current situation fell through. Moreover, the regular care arrangements that were most common among participants were often unreliable, inconsistent, and "make-shift." In part, this is because low-skilled jobs often have unpredictable hours. That is, it is difficult to arrange a regular childcare situation that endures, if the job itself does not have a consistent schedule of work hours. But in addition, because low-income mothers are often the childcare providers of other low-income mothers, providers face many of the same work and family demands as the mothers of the children in their care.

Although informal care providers charge less for their services than do formal centers, informal care is, nevertheless, disproportionately paid care. The aforementioned IWPR study found that informal providers commonly charged for their services; and that welfare recipients paid a greater share of their monthly income on childcare expenses than did low-income single mothers who did not receive welfare. In the *Workplace Environment Study*, the employee respondents paid a median of $50.00 per week for childcare services, and as in the IWPR study, welfare recipients paid a greater share of their monthly income on childcare expenses than did women without welfare experience. In addition to the monetary cost of informal childcare, parents who rely on informal care frequently report that this kind of care obligates them to make their time available to provide reciprocal services. For example, low-income working mothers may trade childcare responsibilities with other low-income parents, share food stamps, or provide meals or transportation services in return for care.

The extent of reliance on informal support, both for childcare and transportation assistance, illustrates the importance of social networks to successful employment experiences. Friends and family members subsidize the cost of working by providing necessary supports to working mothers who cannot afford to purchase these services from more formal sources. The interviews from the *Workplace Environment Study* suggest, however, that a system which relies so heavily on the assistance of friends and family members has its own set of costs as well. The support provided by informal network members is more flexible, less expensive, and sometimes perceived as safer than that available from formal sources; however, as noted above, this support is often unreliable and less durable as well. As a result, several of the interviewees found themselves in

precarious situations because their informal networks could not provide the supports necessary for them to maintain their jobs.

The experience of Cheryl, a 36-year-old woman who worked part time for four years as a food service worker at a stadium concession stand, helps to illustrate the limits of these informal network arrangements. Cheryl took the bus to and from work, and reported that she was late for work a few times a month because of transportation problems. She estimated that it took her slightly less than 2 hours a day to complete the 20-mile roundtrip route. Cheryl did not have a consistent childcare provider. Her 18 year old son (who lived with her), or a neighbor, or relative, usually took care of her children; but she reported that it varied and that "it was hard all the time" to find someone for the days that she needed care. During the four years that she worked, she changed childcare arrangements frequently – "constantly" in her words. She noted that her difficulty in finding a regular care provider was exacerbated by the fact that her work hours were themselves irregular. Cheryl's childcare problems resulted in her being late for work, or missing work, on a weekly basis. Unlike some other employees, Cheryl was able to hold onto her job despite these difficulties. One-third of the respondents, however, reported having lost past jobs (either quitting or being terminated) because of complications with their childcare arrangements.

Employers that were interviewed as part of this same study expressed the difficulties they had keeping workers without consistent childcare or transportation arrangements. Importantly, most of the employers reported that childcare problems were not their most serious concerns and were often willing to make accommodations for occasional tardiness. The majority of employers indicated that they could not tolerate frequent workplace disruptions as a result of the non-work related demands of employees. In the words of one employer, "Usually they don't [arrive late]. But things happen to everyone. I had a cashier that was always late because of the child. She didn't last long. But that was an exception."

The experiences of both Cheryl and Gretchen illustrate the incompatibility of work and family responsibilities in instances when neither informal networks nor formal policies are in place and functioning smoothly. The low wages paid to low-skilled workers prohibit them from purchasing high-quality and consistent formal services, yet for a variety of reasons informal networks cannot always provide the level of support necessary to maintain stable employment.

Conclusion

> *"I want to work. That's not fair to generalize [about welfare recipients' motivations]. Lots of people don't understand people want to work. It's hard to*

stay on welfare. Staying on welfare and having babies to get more money just don't work."

- Welfare recipient interviewee, Workplace Environment Study

With the passage of the PRWORA, the federal government has set forth two clear objectives for welfare recipients: shorter stays on welfare and increased involvement in the labor market. Most welfare recipients would undoubtedly set these same goals for themselves if queried. As the quote above illustrates, just like most other Americans, welfare recipients express a strong commitment to work and independence. The problem with the legislation, then, is not necessarily a mismatch between program objectives and recipient goals, but rather a lack of clarity in how to get there. The bill falls short on recognizing and offering solutions to the labor market constraints and role demands that are real obstacles to the economic independence of welfare recipients.

There are, indeed, many barriers to economic self-sufficiency for welfare recipients that are not satisfactorily addressed in the legislation. The jobs available to most low-skilled workers pay below-poverty wages, are often part-time and temporary, and seldom offer health insurance, childcare benefits, or transportation services. Whereas the prospects for economic self-sufficiency in the context of this economic picture are dim for all low-skilled workers, they are particularly gloomy for welfare recipients. As this chapter has tried to illustrate, the role demands imposed by parenthood often conflict with the demands of the workplace. Managing these multiple and sometimes conflicting demands is especially challenging for low-income parents because they have fewer resources to purchase supports and because jobs in the low-skilled segment of the labor market are less likely to provide the independence and flexibility necessary to respond to these demands.

The PRWORA legislation does include approximately $3 billion dollars in federal funds through the Child Care Development Fund (CCDF) block grant to help states meet the caseload performance goals imposed by the legislation. The new CCDF block grant, which replaced four separate child care block grant programs previously in place, represents an overall increase in federal funds over 1996 levels, and allows states to use the funds to support both low-income welfare and nonwelfare families. Even so, the Urban Institute estimates that the maximum amount available to states through CCDF block grant funds would still leave slightly over half of the welfare caseload without funds. California received $855.5 million in CCDF federal funds, a 26% increase over the 1996 level. According to a recent General Accounting Office report, however, California reports insufficient resources to meet the demand for child care imposed by eligible families. This demand is expected to increase still further, as more welfare recipients run up against work requirements and time-limits. The exact amount of the increase is difficult to estimate, as the number of families relying on unsatisfactory informal care arrangements is unknown.[11]

The shortage of childcare funds for welfare and nonwelfare families is another indication of the necessity to view childcare supports as more than simply transitional. The dual role of parent and worker is a long-term one, and requires continued access to supports as well as a flexible workplace. Without adequate attention to support services, the conflicting demands imposed on working parents will continue to pose problems for workers even after they successfully exit welfare. Thus, as state and local governments move forward in the implementation of welfare reform, it is important for them to recognize the need to increase the supply of low-cost, quality child care, and to subsidize the cost of this child care for greater numbers of low-income parents. A more in-depth discussion of the best manner in which to design and implement childcare services is beyond the scope of this chapter. However, any investigation into the issue needs to carefully consider the "cost-quality-supply" dimensions, the advantages and disadvantages of different types of care, and the specific childcare challenges for parents with infants and with children that require special care, and for parents who work irregular hours, evenings, and early mornings shifts.

Welfare recipients are very much like other low-income parents: they express a strong commitment to work, they find jobs primarily in the low-skilled segment of the labor market, and they balance their employment with child rearing responsibilities and other family demands. The most fruitful approach to understanding and changing work-related behavior of welfare recipients may be to intervene on the side of the workplace, and to increase the formal supports available to low-income parents in general. By proposing an approach that views the problem as larger than the welfare recipient herself, we begin to recognize challenges external to the individual that affect her ability to become economically independent. Interventions that operate to improve employment opportunities, labor market returns, and the compatibility of parenting and employment roles in general, would ultimately improve the economic wellbeing of not just welfare recipients but all poor working families.

Summary of Findings

- Most welfare recipients find employment in the low-wage labor market, and these jobs seldom offer workplace supports that reconcile competing demands of mother-hood and paid labor. Without such workplace supports, and without adequate resources to purchase private childcare services, it is difficult for single mothers to hold on to even the most stable jobs.

- Childcare arrangements among participants are often unreliable, inconsistent, and "make-shift." In part, this is because low-skilled jobs often have unpredictable hours, and it is difficult to arrange a regular childcare situation for a job that does not have a consistent schedule. In addition, low-income mothers are often the childcare

providers of other low-income mothers, and face many of the same work and family demands as the mothers of the children in their care.

- The jobs of welfare recipients, as well as those of other workers in the low-wage labor market, are often insecure because employers rely increasingly on a temporary workforce, and because low-skilled workers are often the first casualties during periods of economic uncertainty.

- The most fruitful approach to understanding and changing work-related behavior of welfare recipients may be to intervene on the side of the workplace, and to increase the formal supports available to low-income parents in general.

Notes

[1] This chapter summarizes research conducted by Julia R. Henly, Yeheskel Hasenfeld, and Joel Handler. A fuller report of this research, "Barriers to Finding and Maintaining Jobs: The Perspective of Workers and Employers in the Low-Wage Labor Market", will appear as a chapter in J.F. Handler & L. White, (forthcoming) ***Hard Labor: Poor Women and Work in the Post-Welfare Era***, Armonk, NY: M.E. Sharpe, Inc. The original research was supported primarily through funds provided by The Urban Institute to Julia R. Henly, Yeheskel Hasenfeld, and Joel F. Handler. The UCLA Center for American Politics and Public Policy (CAPPP) and the UCLA Institute of Industrial Relations (IIR) also provided support to this project. The California Department of Social Services generously provided permission to Henly, Handler, and Hasenfeld to access the welfare data for this project. The opinions and conclusions expressed herein are solely those of the authors and should not be considered as representing the policy of any agency of the California State Government, the Urban Institute, or UCLA. All errors in the reporting and interpretation of study findings are the responsibility of the author.

[2] Mary Jo Bane and David T. Ellwood (1994). ***Welfare Realities: From Rhetoric to Reform***. Cambridge, MA: Harvard University Press.

[3] See, for example, Blank, "*It Takes a Nation;"* S.H. Danziger and Gottschalk, ***America Unequal*** (Cambridge, MA: Harvard University Press, 1995); Lawrence Mishel and Jared Bernstein**, *The State of Working America*** *1994-1995* (Economic Policy Institute, 1994); R.B. Freeman, "How Much Has De-Unionization Contributed to the Rise in Male Earnings Inequality?" *in* ***Uneven Tides: Rising Inequality in America***, ed. S. Danziger and P. Gottschalk (New York: Russell Sage Foundation, 1994), pp. 133-64; S.H. Danziger and D.H. Weinberg, "The Historical Record: Trends In Family Income, Inequality, And Poverty," in ***Confronting Poverty: Prescriptions for Change***, ed. S.H. Danziger, G.D. Sandefur and D.H. Weinberg (Cambridge, MA: Harvard University Press, 1994), pp. 18-50.

[4] Roberta Spalter-Roth (1993). "The Real Employment Opportunities of Women Participating in AFDC: What the Market Can Provide." ***Women and Welfare Reform: Women's Poverty, Women's Opportunities, and Women's Welfare: Conference Proceedings***, pps 70-75. Washington, D.C.: Institute for Women's Policy Research.

[5] Kathleen M. Harris, "Life After Welfare: Women, Work And Repeat Dependency," ***American Sociological Review*** 61 (1996): 407-26; D.P. McMurrer, I.V. Sawhill and R.I. Lerman, ***Welfare Reform and Opportunity in the Low-Wage Labor Market***, Discussion Paper No. 5, Urban Institute, July, 1997.

[6] These findings are reported in Julia R. Henly (forthcoming) Barriers to Finding and Maintaining Jobs: The Perspective of Workers and Employers in the Low-Wage Labor Market, in J.F. Handler & L. White, ***Hard Labor: Poor Women and Work in the Post-Welfare Era***, Armonk, NY: M.E. Sharpe, Inc. The interviews were part of *the Workplace Environment Study*, a study of low-wage work in Los Angeles County. Semi-structured interviews were conducted between July 1996 and July 1997 with a convenience sample of 74 employees (both with and without welfare experience) and 30 employers in the low-skilled segment of the labor market.

[7] Ong, Paul M. (1996) "Work and Automobile Ownership Among Welfare Recipients," ***Social Work Research***, Volume 20 (4), pp. 255-262.

[8] Julia R. Henly, op. cit.

[9] See Kathryn Edin & Laura Lein (1997). ***Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work***. New York: Russell Sage Foundation; Sandra Hofferth, S. (1995). "Caring for Children at the Poverty Line**." *Children and Youth Services Review** 17* (Nos. 1-3): 61-90; Institute for Women's Policy Research (1996). ***Child Care Usage Among Low-Income and AFDC Families***. Research-In-Brief Report.

[10] J.R. Henly, op.cit.

[11] Information about CCDF is based on GAO report T-HEHS-98-148, Child Care: States Efforts to Expand Programs Under Welfare Reform, Testimony of Mark Nadel, April 22, 1998. The reference to the Urban Institute study on childcare shortages is cited in this GAO report.

Chapter 7
Welfare Recipients and the Los Angeles Labor Market

Employment Trends in Los Angeles County, 1990-1997

A Major Recession and Its Impacts

The decision to implement a major change in the administration of county welfare programs in California has come at the end of the most serious loss in employment in Los Angeles since the 1930s. Between 1990 and 1994, Los Angeles County lost 10.5 percent of its wage-and-salary jobs (see Table 8). During this period of contraction, very few industry sectors within the local economy escaped without major job losses. The downturn took place concurrently with a nationwide recession, but was greatly exacerbated locally by a loss of jobs in defense-related production. Nearly a third of the overall job loss was concentrated in durable goods manufacturing, and nearly two-thirds of that decline was in aerospace-related production.

One result of the mass layoffs that occurred between 1990 and 1994 was a substantial increase in the level of unemployment. During several months of this period, the jobless rate hovered at over 10 percent of the civilian labor force, and the total number of unemployed workers reached almost half a million in mid-1992 (shortly after the civil disturbances of that year). As recently as 1994, the annual-average jobless estimate was still above 400,000 workers.

While the Los Angeles economy pulled out of its five-year decline in 1995, by 1997, the total number of jobs in the area was still shy of the 1990 level (on an annual-average basis). In short, the area has endured seven years without any increase in employment, which remains at a level last recorded in 1987. Most notably, the current level of jobs in manufacturing is still 20 percent lower than in 1990, and construction employment is 17 percent below the level of that year. Among manufacturing industries, only textiles and apparel have managed to expand throughout this period.

Within the service-producing sector, even such long-time job generators as public utilities, trucking, wholesale and retail trade, banking, insurance, real estate, and government were still under their 1990 employment levels by 1997. Among the few

Table 8

Civilian Labor Force and Wage and Salary Employment Data

Los Angeles County Annual Averages, 1990, 1994, 1996, and Estimated 1997

(Source: California Employment Development Department)

Title	1990	1994	1996	1997	Change 90-94	Change 94-96	Change 96-97
Civilian Labor Force	4,511,000	4,366,200	4,394,300	4,496,700	-144,800	28,100	102,400
Civilian Employment	4,244,800	3,957,000	4,033,200	4,189,200	-287,800	76,200	156,000
Civilian Unemployment	266,200	409,200	361,100	307,500	143,000	-48,100	-53,600
Civilian Unemployment Rate	5.90%	9.40%	8.20%	6.80%	3.5	-1.2	-1.4
Total, All Industries	4,147,100	3,710,400	3,795,800	3,879,200	-436,700	85,400	83,400
Total Farm	13,700	8,500	7,200	7,000	-5,200	-1,300	-200
Total Nonfarm	4,133,300	3,701,900	3,788,500	3,872,200	-431,400	86,600	83,700
Goods Producing	975,600	753,300	758,000	779,100	-222,300	4,700	21,100
Mining	7,900	6,700	5,700	5,700	-1,200	-1,000	0
Construction	133,100	105,100	107,500	110,000	-28,000	2,400	2,500
Manufacturing	834,600	641,500	644,700	663,400	-193,100	3,200	18,700
Durable Goods	525,500	356,100	352,300	363,800	-169,400	-3,800	11,500
Lumber & Wood Products	12,700	8,700	9,800	10,500	-4,000	1,100	700
Furniture & Fixtures	32,300	23,500	24,400	26,300	-8,800	900	1,900
Stone, Clay, & Glass	17,200	13,200	12,300	12,700	-4,000	-900	400
Primary Metals	20,300	14,400	15,000	15,800	-5,900	600	800
Fabricated Metal Products	62,200	46,600	46,000	47,300	-15,600	-600	1,300
Industrial Machinery	56,300	46,200	46,500	48,500	-10,100	300	2,000
Electronic Equipment	61,600	43,100	44,700	46,000	-18,500	1,600	1,300
Transportation Equipment	155,100	89,300	82,400	83,300	-65,800	-6,900	900
Aircraft & Parts	123,300	67,900	62,300	62,800	-55,400	-5,600	500
Missiles, Spacecraft & Pts.	14,900	5,800	4,300	4,500	-9,100	-1,500	200
Instruments & Related Prds.	89,000	53,400	53,200	54,900	-35,600	-200	1,700
Miscellaneous Mfg.	19,000	17,700	18,100	18,600	-1,300	400	500
Nondurable Goods	309,100	285,400	292,400	299,500	-23,700	7,000	7,100
Food & Kindred Products	48,300	43,400	42,300	43,100	-4,900	-1,100	800
Textile Mill Products	10,400	12,000	13,700	15,200	1,600	1,700	1,500
Apparel & Other Textiles	95,900	98,300	110,900	114,900	2,400	12,600	4,000
Paper & Allied Products	17,400	16,000	16,300	16,200	-1,400	300	-100
Printing & Publishing	60,100	50,400	47,900	48,500	-9,700	-2,500	600
Chemicals & Allied Prod.	28,700	24,100	22,800	23,700	-4,600	-1,300	900
Petroleum & Coal Products	10,700	9,200	7,300	6,900	-1,500	-1,900	-400
Rubber & Misc. Plastics	33,400	28,100	27,400	27,400	-5,300	-700	0
Leather & Leather Products	4,400	3,900	3,700	3,700	-500	-200	0
Service Producing	3,157,800	2,948,600	3,030,600	3,093,100	-209,200	82,000	62,500
Transportation & Public Util.	211,600	201,600	204,700	210,200	-10,000	3,100	5,500
Transportation	142,100	136,800	142,800	147,400	-5,300	6,000	4,600
Trucking & Warehousing	52,400	50,000	42,200	44,300	-2,400	-7,800	2,100
Communications & Utilities	69,500	64,800	61,900	62,800	-4,700	-2,900	900
Trade	949,600	821,500	840,700	858,400	-128,100	19,200	17,700
Wholesale Trade	301,900	253,100	257,400	264,300	-48,800	4,300	6,900
Retail Trade	647,700	568,400	583,400	594,100	-79,300	15,000	10,700

Table 8 continued

Title	1990	1994	1996	1997	Change 90-94	Change 94-96	Change 96-97
Finance, Insurance & Real Es.	277,600	237,100	217,200	219,500	-40,500	-19,900	2,300
Finance	138,500	118,700	107,900	109,400	-19,800	-10,800	1,500
Insurance	78,400	64,800	57,800	58,000	-13,600	-7,000	200
Real Estate	60,600	53,500	51,500	52,100	-7,100	-2,000	600
Services	1,179,200	1,154,800	1,234,900	1,267,300	-24,400	80,100	32,400
Hotels & Other Lodging Pl.	45,700	36,500	37,600	38,500	-9,200	1,100	900
Personal Services	38,000	36,200	38,100	37,700	-1,800	1,900	-400
Business Services	253,500	251,700	292,100	309,000	-1,800	40,400	16,900
Motion Pictures	90,600	111,800	135,700	141,000	21,200	23,900	5,300
Amusement & Recreation	53,000	49,900	50,400	51,100	-3,100	500	700
Health Services	251,500	256,300	261,700	264,600	4,800	5,400	2,900
Private Educational Services	73,400	66,500	72,300	74,100	-6,900	5,800	1,800
Engineering & Management	138,700	119,800	116,400	119,500	-18,900	-3,400	3,100
Other Services	234,900	226,300	230,600	231,800	-8,600	4,300	1,200
Government	539,800	533,700	533,000	537,800	-6,100	-700	4,800
Federal Government	71,900	64,900	61,200	58,100	-7,000	-3,700	-3,100
Department of Defense	11,100	9,100	6,700	5,000	-2,000	-2,400	-1,700
State Government	69,900	69,200	70,300	70,900	-700	1,100	600
Local Government	398,100	399,700	401,500	408,800	1,600	1,800	7,300

exceptions were the motion picture industry, health services (in which employment has increased by only 5.2 percent for the seven-year period), and business services (largely because of growth in temporary placement agencies). Preliminary estimates by the Employment Development Department for the second half of 1997 and early 1998 point to an increase in the rate of employment growth. However, these newer estimates are based on a sampling of firms, and it is still possible that when actual counts of employer data is finished, the employment estimates will be revised downward.

The outlook for future job growth in Los Angeles County is clouded by several factors. First, although aerospace employment stemmed its decline during 1997, consolidation of local firms and an uncertain outlook for local production will probably result in additional layoffs in this high-wage sector. In the finance division, mergers of major firms are likely to reinforce the trends of declining job opportunities in the banking and insurance industries, where jobs are also being affected by technological change. A major contributor to recent employment growth since 1990 has been the motion picture industry. It has grown by 55 percent since the start of the decade and has accounted for 28 percent of the net increase in jobs since 1994. However, recent trends may indicate that this expansion is about to level off. Moreover, much of the remaining recent job growth has occurred in low-wage industries such as apparel manufacturing and retail trade, or in temporary help agencies.

Unemployment and Discouraged Workers in Los Angeles County

Large Increases in the Number of Unemployed

As would be expected, given the amount of jobs that have disappeared from the Los Angeles labor market since 1990, there has been a large and sustained increase in the number of unemployed workers and a sharp decline in labor force participation rates over the past seven years. Although the 1980s were also characterized by long periods of high unemployment, after a long, slow recovery from the severe recession that occurred early in that decade, by 1988 the level of unemployment had fallen to an annual-average of 223,400. When the first phase of recent layoffs in the aerospace industry started in 1989, the number of jobless workers began to rise, and eventually reached a peak of nearly half a million by mid-1992. For all but four months of the 1992-94 period, the number of unemployed workers remained above 400,000, and the unemployment rate hovered between 9.3 and 10.5 percent of the labor force. By 1996, the average level of unemployment was still high, at 362,900, and the jobless rate was 8.2 percent. Although the annual-average unemployment rate for 1997 was down to 6.8 percent, this was still substantially higher than the average of 5.2 percent for 1988. The average unemployment level for 1997 was 307,599, and was above 300,000 for eight months of that year.

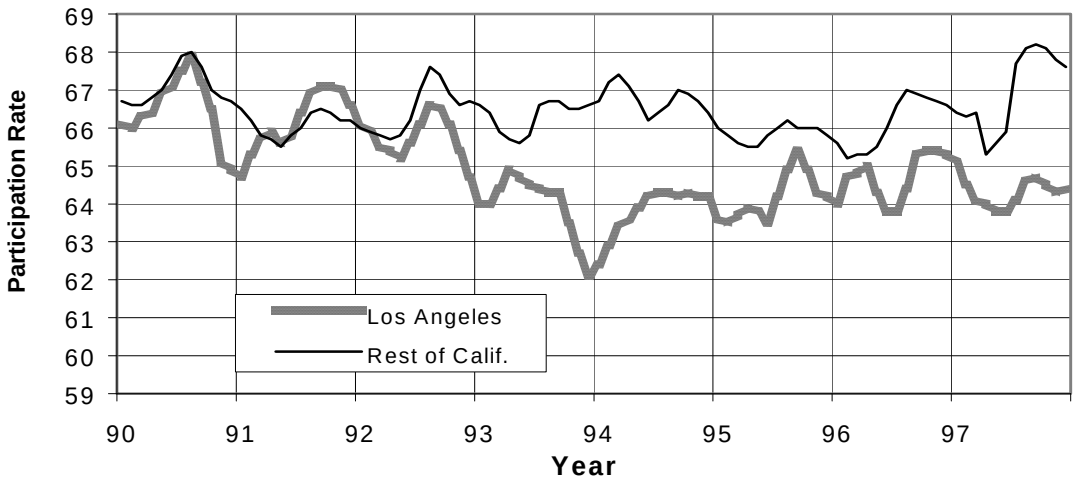
Evidence of a Substantial Discouraged Worker Component

Along with the substantial increase in the number of unemployed in Los Angeles County during the 1990s, the sharp decline in job opportunities has resulted in a decrease in the share of the working-age population that is participating in the labor market; that is, either employed, or unemployed and actively seeking work. Workers who want a job, and who would probably be in the labor force (as officially defined) as unemployed job seekers if they thought that it was possible to find employment, are referred to as "discouraged workers." This is a form of hidden unemployment. Discouraged workers, along with their counterparts within the official labor force who work less than full time because they cannot find full-time work, are referred to by the U.S. Department of Labor as "underutilized workers."

Measuring Discouraged Workers: Model 1

A reliable official measure of discouraged workers for Los Angeles County is not available because of the relatively small size of the government's monthly household survey. However, official data concerning labor force participation can provide some indication of the level of discouragement. Two methods were developed to estimate discouraged workers. The data used here have been taken from published and unpublished Depart-

Figure 25
Comparison of Labor Force Participation Rates for Los Angeles County and The Remaider of California, by Month, 1990-1997



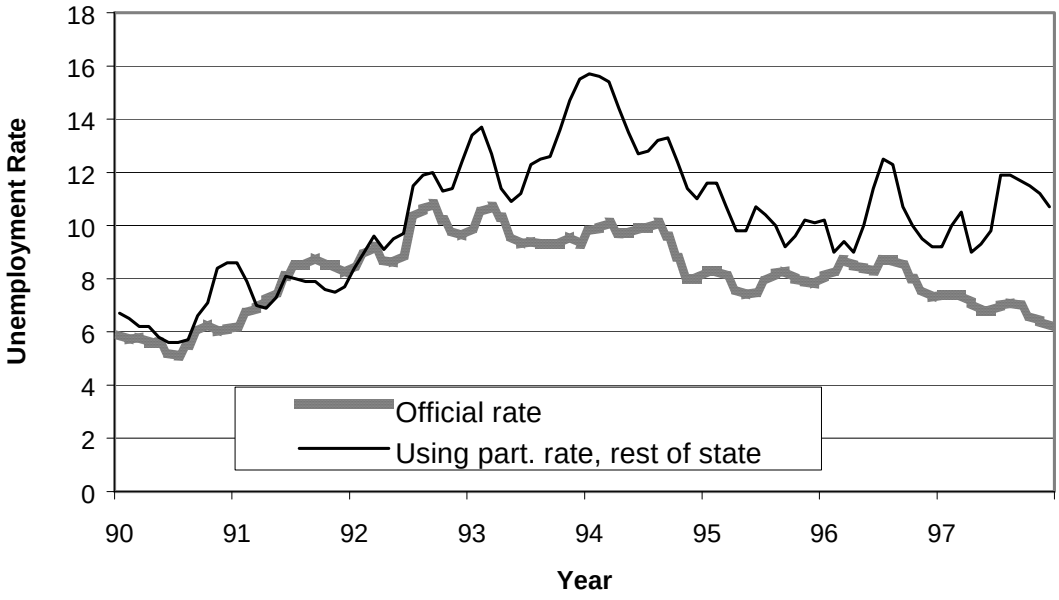
ment of Labor sources. The first model compares the labor force participation rates for Los Angeles County with those for the rest of California, as shown in Figure 25. This method assumes that there are no significant differences in the overall characteristics of workers in Los Angeles County compared to those in the rest of the state that would result in substantially different labor force participation rates. Or, more particularly, even if there were such significant differences, they would not be expected to arise suddenly within a five-year period. This model also assumes that any divergence between the two groups, in terms of labor force participation, would result from the relative difficulty of obtaining work between the two areas of the state.

In this first method, the unemployment rate for Los Angeles was recalculated using the following steps:

1. The overall labor force participation rate for the rest of California was applied to the working-age population of Los Angeles County in order to determine the probable actual size of the county's civilian labor force.

2. The difference between the "official" labor force (i.e., the combined total of employed workers and unemployed workers actively looking for jobs) and the recalculated civilian labor force was assumed to be the number of discouraged workers.

Figure 26
Official Unemployment and Unemployment Rate Using Balance of California Participation Rate
Los Angeles County, 1990-1997



3. The discouraged worker component was added to the official unemployment figure for the county to determine the total number of available unemployed workers.

For the eight-year period of 1990 through 1997, the official annual-average estimate of unemployment reached a peak of 431,000 in 1992, and declined to 307,000 by 1997 in Los Angeles County. The recalculated labor force data showed a peak jobless level of 602,000 (reached in 1994), which then declined to 499,000 by 1997. The official average unemployment figure for that eight-year period was 362,000, while the recalculated estimate was 469,000, or nearly 30 percent higher. The official unemployment rate for the period increased from 5.8 percent in 1990 to a peak of 9.7 percent in 1993, and fell to 6.8 percent in 1997. The new estimate shows a rate of 6.7 percent in 1990, a high of 13.1 percent in 1994, and a rate of 10.6 percent in 1997 (see Figure 26).

There appeared to be a small underlying difference between the labor force participation rates of Los Angeles and the rest of the state during 1990. The application of the remainder-of-state participation rates to the Los Angeles County working-age population for 1990 (at the beginning of the recession) produced an unemployed estimate that was 46,000 higher than the official estimate. This difference fell to 14,000 in 1991, but then

Table 9
RECALCULATED UNEMPLOYMENT RATES FOR LOS ANGELES COUNTY

Comparison of Annual-Average Unemployment Rate for California, Los Angeles, and Remainder of State with Calculation of New Rate for Los Angeles, Using Remainder of State Participation Rate (1990 to 1997)

Year	California	Balance of State	Los Angeles County	New Los Angeles Rate
1990	5.6	5.5	5.8	6.7
1991	7.5	7.4	8.0	7.7
1992	9.1	8.9	9.6	10.9
1993	9.2	9.0	9.7	13.0
1994	8.6	8.3	9.4	13.1
1995	7.8	7.8	7.9	10.2
1996	7.2	6.8	8.2	10.2
1997	6.3	6.1	6.8	10.6

rose to 190,000 by 1994. The annual unemployment difference subsequently declined to 95,000 in 1996, but then rose suddenly to a high for the seven-year period of 192,000 in 1997.

Official and recalculated annual-average unemployment rates for Los Angeles County are shown in Table 9. Detailed data for the method used to produce recalculated monthly unemployment rates for Los Angeles County are shown in the Appendix.

Measuring discouraged workers: Model 2

The second method of estimating the discouraged-worker group in Los Angeles County takes the official labor force participation rates for Los Angeles for 1989 (by race and gender) and applies them to the same population groups within the county's working-age population in 1997. All data used were annual averages. The three racial categories used were White, Black, and All Other. (Although the Department of Labor collects data on the Hispanic population, in the form it was released it could not be incorporated into this analysis. Approximately 80 percent of Hispanics are included within the White category.) If the labor force participation rate for each race-gender group had been the same in 1997 as it was in 1989, the unemployment rate for 1997 would have been 10.1 percent, instead of the official rate of 6.8 percent. This result is fairly close to the 10.6 percent estimate for 1997 obtained in the first model (above) by using the participation rates for the rest of California, although the estimate of 470,000 unemployed that was produced by the second model using the 1989 participation rates was lower than the 499,000 estimate produced by the remainder-of-state participation rates.

Both of these models present strong evidence that the true level of unemployment is likely to be much higher than the official unemployment estimate for Los Angeles County. There does not appear to be any explanation for the existence of this large and often overlooked population of discouraged workers other than virtual exclusion of large numbers of working-age adults from opportunities for gainful employment. Although the working-age population in Los Angeles County increased by 236,000 between 1990 and 1997, the number of employed residents fell by 42,000, and the number of those meeting strict definitions for unemployment used by the Department of Labor rose from 259,000 to 307,000 during that seven-year period.

The picture that emerges from this analysis is one of a severe crisis in access to jobs for a large portion of Los Angeles County's workforce, and a weak recovery that has done little to ameliorate the situation. It is apparent that the recent dramatic declines in the official unemployment rate in Los Angeles County are principally the result of worker discouragement rather than by any major improvement in employment conditions.

Trends in the AFDC Program in Los Angeles County

Prior to recent welfare reform legislation, the county's family aid program, now known as TANF, was called Aid to Families with Dependent Children (AFDC) and had two principal components. The larger component, in terms of the number of recipients, was Family Group aid, which provided benefits to families with children 17 years of age and younger who suffered economic deprivation because of the absence or incapacitation of a parent (usually the father). The Unemployed Parent component provided aid to families with children whose principal source of support (usually the father, who remained with the family unit) had become unemployed.

Los Angeles County

In Los Angeles throughout most of the 1980s, the number of persons in families receiving AFDC remained in the 750,000-to-850,000 range, or between 6.5 and 7.0 percent of the county's total population. The percent of the population receiving AFDC benefits was 6.8 in 1981, rose somewhat to 7.0 percent in the 1984-86 period following a severe recession, but by 1987 it had fallen to 6.3 percent of the county's population. With the onset of Los Angeles' latest and most severe recession in over 50 years, the percentage of county residents receiving aid surged to 7.6 in 1991, and reached a peak in 1996 at 10.3 percent of the population, with an average of 865,174 aid recipients in that year.

Table 10
HISTORICAL AFDC CASELOAD SIZE

Aid to Families with Dependent Children, by Program Average Monthly Number of Persons Receiving Benefits Fiscal Years Ending June 30, 1980 to 1997 Los Angeles County and the Remainder of California

FAMILY GROUPS

	Los Angeles County			Remainder of State		
Year	**Recipients**	**% of State**	**Ann. % Chg.**	**Recipients**	**% of State**	**Ann. % Chg.**
1980	467,033	39.4	.	717,500	60.6	.
1981	455,870	37.2	-2.4	770,913	62.8	7.4
1982	436,625	36.2	-4.2	770,663	63.8	0.0
1983	462,685	38.6	6.0	735,127	61.4	-4.6
1984	476,455	38.5	3.0	759,675	61.5	3.3
1985	485,767	38.7	2.0	767,911	61.3	1.1
1986	498,648	38.6	2.7	793,444	61.4	3.3
1987	499,272	37.0	0.1	848,752	63.0	7.0
1988	481,722	35.0	-3.5	895,220	65.0	5.5
1989	483,899	34.1	0.5	933,251	65.9	4.2
1990	520,053	34.5	7.5	985,815	65.5	5.6
1991	578,352	35.4	11.2	1,056,854	64.6	7.2
1992	624,526	35.1	8.0	1,153,794	64.9	9.2
1993	658,683	35.4	5.5	1,202,952	64.6	4.3
1994	690,416	35.1	4.8	1,276,482	64.9	6.1
1995	694,060	34.6	0.5	1,314,473	65.4	3.0
1996	675,059	34.0	-2.7	1,307,933	66.0	-0.5
1997	621,360	33.3	-8.0	1,243,916	66.7	-4.9

UNEMPLOYED PARENT

	Los Angeles County			Remainder of State		
Year	**Recipients**	**% of State**	**Ann. % Chg.**	**Recipients**	**% of State**	**Ann. %. Chg.**
1980	50,366	29.4	.	120,828	70.6	.
1981	57,209	21.8	13.6	204,943	78.2	69.6
1982	64,832	19.9	13.3	261,338	80.1	27.5
1983	80,939	22.3	24.8	282,807	77.7	8.2
1984	85,402	23.1	5.5	284,045	76.9	0.4
1985	85,033	23.9	-0.4	271,240	76.1	-4.5
1986	83,983	24.4	-1.2	259,972	75.6	-4.2
1987	79,239	23.2	-5.6	262,724	76.8	1.1
1988	69,826	20.9	-11.9	264,522	79.1	0.7
1989	66,922	20.3	-4.2	262,957	79.7	-0.6
1990	88,669	25.3	32.5	262,154	74.7	-0.3
1991	106,879	25.9	20.5	306,346	74.1	16.9
1992	127,874	26.2	19.6	360,068	73.8	17.5
1993	157,805	28.5	23.4	395,290	71.5	9.8
1994	183,054	28.8	16	453,152	71.2	14.6
1995	188,587	28.1	3	482,397	71.9	6.5
1996	190,115	28.7	0.8	472,706	71.3	-2
1997	175,815	28.7	-7.5	437,201	71.3	-7.5

Remainder of California

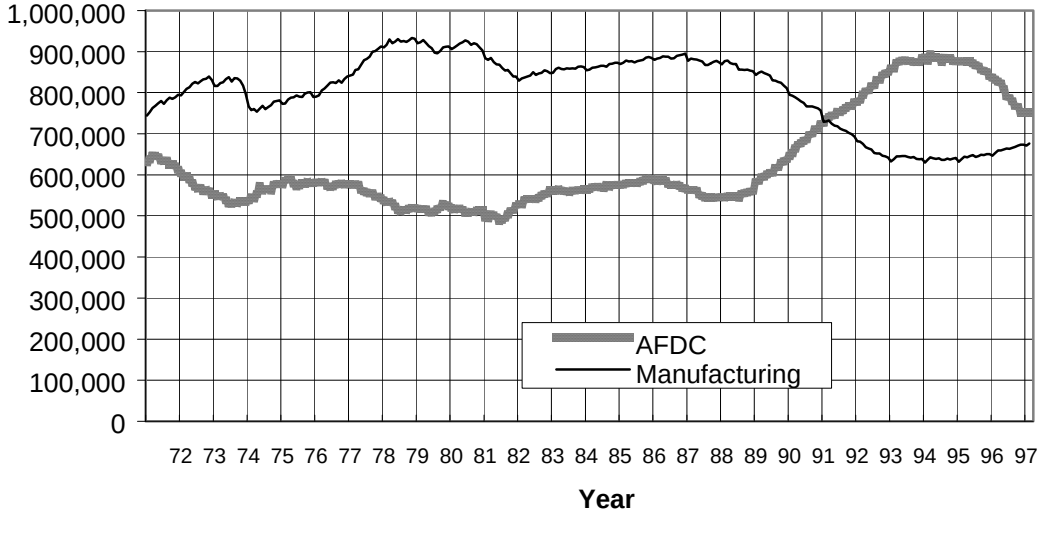
Trends in the number of aid recipients for all other counties in California combined have followed a pattern similar to that for Los Angeles, except that during the 1980s the percent of the population receiving aid in the rest of the state was around 6 percent, or about one percentage point below the Los Angeles share. For the remainder of the state, the peak year for the share receiving aid (as in Los Angeles) was 1996, although at 7.8 percent it was 2.5 percentage points below the Los Angeles share. In that year, an average of 1,780,639 non-Los Angeles Californians received aid. The impact of the recession during the first half of the 1990s was not as severe in the rest of California as it was in Los Angeles County.

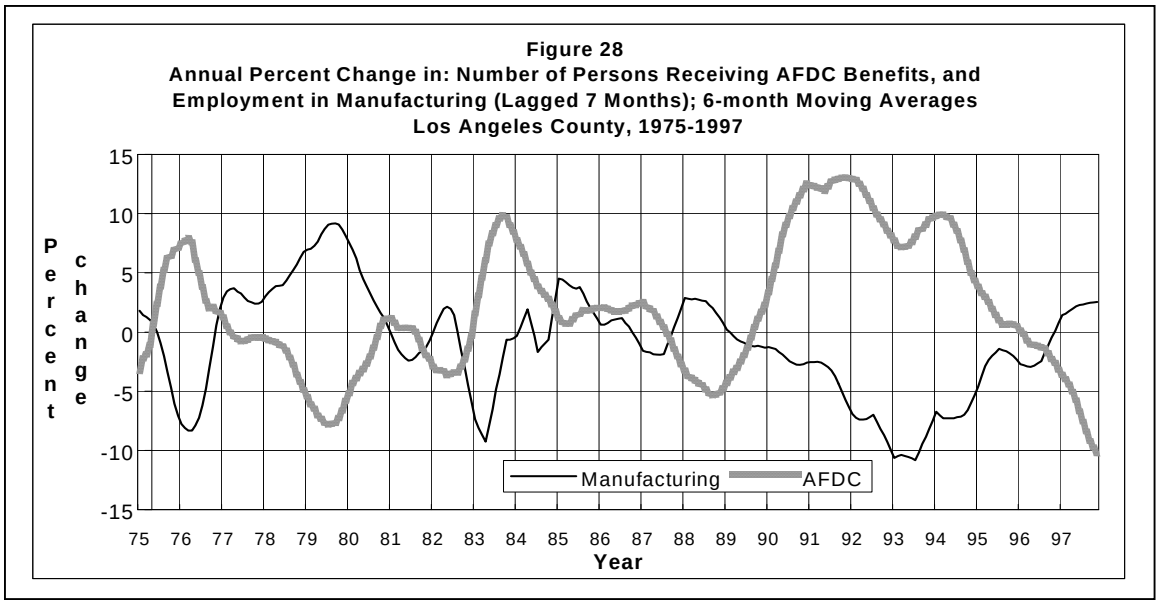
Aid Recipients and Employment Trends in Los Angeles County

A Relationship Between Welfare Rolls and Economic Performance

A casual examination of trends in the number of AFDC recipients over time shows that the number of persons in the aid program rises and declines with certain measures of economic activity such as the unemployment rate. The number receiving aid rises when employment growth slows. One key relationship is the rate of change in the level of total

Figure 27
Comparison of Manufacturing Employment and Persons Receiving AFDC Benefits, 1971-1997
Los Angeles County





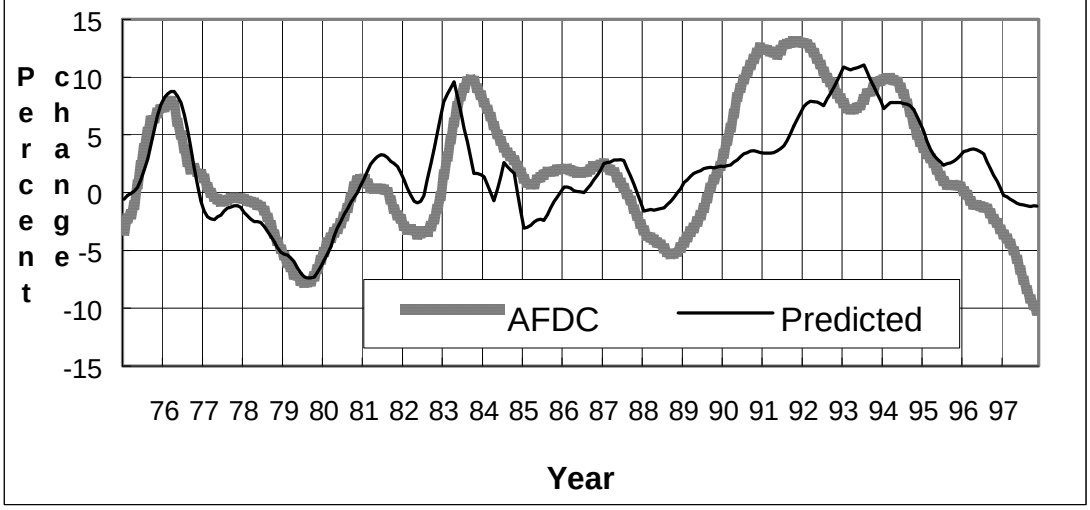
manufacturing employment in Los Angeles County and the rate of change in the number of local AFDC recipients in the Family Groups program. A test of this relationship was performed, using a regression analysis of the historical data. A plot of the level of actual manufacturing employment and the monthly number of persons receiving aid benefits during the years 1972 to 1977 is presented in Figure 27. The trend lines for these two data series show that the number of aid recipients rises as employment growth slows.

Predicting Changes in the Number of Aid Recipients

Figure 28 shows the same data, but displays the annual percent change for each of the two monthly data series. The data have been smoothed with six-month moving averages to eliminate, as much as possible, seasonal and administrative differences. The manufacturing data have been lagged (moved forward in time) by seven months. This means that the best fit of the data occurs when the assumption is made that, on average, a change in the level of employment in manufacturing will be followed seven months later by a change (in the opposite direction) in the number receiving aid.

A regression of the aid-recipient data against the lagged manufacturing employment data produced a corrected r-square value of .56, suggesting that, for the period chosen for this model (1975-1997), annual changes in the level of employment in manufacturing can explain a little over half the annual changes in the number of AFDC recipients. (Higher

Figure 29
Annual Percent Change in Number of Persons Receiving AFDC Benefits, 6-month Moving Averages, Actual and Predicted for Los Angeles County 1975-1997



r-square values can be obtained by breaking up the time periods for separate tests.) Figure 29 shows a plot of both the actual moving average of percent changes in the number of aid recipients, and the values predicted by the model.

Anyone who has experienced a recession and seen unemployment, poverty, and welfare caseloads increase, would find it reasonable to assume that there is an underlying relationship between the number of opportunities for earning a viable income and the general level of economic activity. However, the quantification of these relationships is difficult, and probably for this reason they are not often discussed. This simple model does not attempt to portray what is, in reality, a complex chain of events, but rather to suggest that there exists a strong relationship between the number of jobs available that can support a family, and the number of families that can support themselves. This relationship is not limited to manufacturing employment. For example, a similar fit can be obtained by using total employment as an independent (or predictor) variable. The strong relationship between manufacturing employment data and recipient caseloads probably exists because the manufacturing sector is basic to the Los Angeles economy, has a more sensitive data series, and tends to lead changes in the rest of the economy by several months.

Policy Implications for Job Creation

The relationship between the ability of a local economy to produce enough jobs for the available labor force and the need of jobless workers for monetary assistance to survive takes on fresh significance with the advent of welfare reform. If welfare is no longer the safety net for ensuring economic survival, then government policy makers must address the issue of ensuring that jobs are available for people needing work.

The Unemployment Insurance system and the AFDC program were both designed as temporary cushions for those who suffer a loss in income resulting from short-term and localized fluctuations in the economy or from a family's loss of its principal wage earner. During the 1950s and 1960s, when economic growth was strong, bouts of rising unemployment were brief and infrequent. However, since the 1970s, economic downturns have grown more frequent and severe, and their recoveries slower and weaker. As a consequence, aid systems that were meant to work as short-term counter-cyclical infusions of income into the economy have come to account for an increasingly bigger share of national and local budgets, particularly during periods of declining economic activity when government receipts are also falling.

The issues of a "sustainable" rate of economic growth and "acceptable" levels of unemployment have been part of the discourse on national economic policy for decades. All of the recessions that have taken place in the U.S. since the 1950s have followed, by several months, a major increase in key interest rates by the Federal Reserve System. Whatever the causes of these recessions, which have grown successively deeper and longer with each new downturn, they result in a loss of jobs and earned income for a significant share of the population. Implicit within debates on the issue of what is an appropriate level of economic growth for the nation is the understanding that it is within the capacity of the federal government to follow policies that can create a high demand for labor and very low levels of unemployment. Such policies have had remarkable success several times in the past without adverse effects on economic productivity or efficiency.

Since the obvious answer to high levels of unemployment (and the closely related issue of public assistance) is a sufficient number of jobs, it follows that government could address these problems by ensuring that there are adequate sources of employment in the economy for all those who need a job to survive, and who are capable of working. Within the short term, part of the deficit in jobs can be met by job-creation programs similar to those in effect during the 1960s and 1970s, such as the Job Corps, PEP, and CETA programs. In a broader, more permanent approach, only a national policy that promotes much higher levels of employment than currently exist can begin to deal with the problem of inadequate levels of income among a large share of the population.

The history of the economic development of Los Angeles County during the past 60 years has been strongly tied to the implementation of government policy. During the early 1940s, the number of people working in the county more than doubled with the tremendous expansion in production for the war effort. The continued maintenance of a large high-wage aerospace sector in the post-war period, largely funded by defense expenditures, was a major source of continued prosperity and growth in the area. The massive construction projects associated with automotive transport, funded through federal and state programs, provided many jobs throughout the 1950s and 1960s. During those years, the level of unemployment in the area remained relatively low, particularly in comparison to the 1990s.

There are still many potential public improvement projects that are not only needed to improve the quality of life in Los Angeles and to make the area a more desirable and efficient place to do business, but which would also serve to create many jobs if they were funded. These could include the expanded construction of local passenger and freight rail systems, repair and improvement of the educational infrastructure, rehabilitation of deteriorating public buildings, earthquake-retrofitting of many high-rise structures, construction of a system for treating the street run-off water that flows directly into the ocean, and expansion of air-quality monitoring and improvement.

Summary of Findings

- Los Angeles County lost 436,700, or 10 percent, of its jobs between 1990 and 1994; by 1997 it had regained only 168,800 of these jobs.

- Despite the beginning of an economic recovery, unemployment in Los Angeles County still averages close to 300,000.

- Because of a sizeable number of discouraged workers, the true level of unemployment may well be as much as 150,000 to 200,000 higher than the official unemployment figure for Los Angeles County. This means that the actual current unemployment rate could be approximately 10.5 percent. There does not appear to be any explanation for this large and often overlooked population of workers other than virtual exclusion of large numbers of working-age adults from opportunities for gainful employment.

- Historical labor force and welfare caseload data demonstrate a strong relationship between the number of jobs available that can support a family and the number of families that can support themselves. This is reflected in a direct correlation between changes in employment and changes in welfare caseloads in Los Angeles.

Chapter 8
Occupations and Industries Employing Aid Recipients

Introduction

Over the past five years, Los Angeles County's primary employment program for aid recipients, GAIN, has utilized a strategy called "Jobs First" that attempts to quickly move recipients into employment while minimizing time and money spent on skill development. The new philosophy on which the Jobs First program model is based is expressed by staff to participants as follows:[1]

- **Work is valuable**.
  You will be better off financially.
  As a working parent, you can be a working role model for your children.
  Being on welfare is bad for your self esteem.

- **Any job is a good job.**
  The best way to get a better job is to first get your foot in the door.
  Even a minimum wage job is better than none at all.

- **You can get a job.**
  With the proper attitude and job seeking skills, anyone can find a job in Los Angeles.

- **Continued education may also be valuable.**
  You can get an education, but the best way is to get a job first, and then go to school in the evenings.
  If you go to school as part of GAIN, it will be short term, with the goal of getting you into a job quickly.

Because of the emphasis on immediate employment, it is likely that many aid recipients are returning to the same jobs in which they previously worked. The "Jobs First" approach is based on reducing the amount of welfare benefits paid to recipients, not on enabling them to be financially self-sufficient. Self-sufficiency has now become critical given the 5-year lifetime limit on aid benefits. This chapter looks at the feasibility of finding stable, family-supporting jobs in occupations that are typical sources of employment for welfare workers.

A total of 343 occupations and 220 industries that employ public assistance recipients in Los Angeles County are identified in 1990 Census PUMS data (complete tables of industries and occupations are found in the Appendix). In contrast to previous chapters which

focused on single mothers, most information in this chapter is about all working-age (16-64 years) people in the county receiving public assistance, including men and General Relief recipients, who had identifiable occupations.

In presenting findings from this data we first compare the occupational and industrial distributions of aid recipients to those of all workers in Los Angeles County, to identify the major occupational and industrial niches in which aid recipients worked. Second, we compare the demographic profiles of the major occupations and discuss the connection between educational attainment and occupations. Third, we assess the occupational profiles of aid recipients with different degrees of work experience. This is followed by a comparison of the hours and earnings in each occupation, for aid recipients and all workers. The last sections evaluate overall labor market trends, and offer an assessment of prospects for economic self-sufficiency in major occupations of welfare workers.

Public assistance recipients with recent work experience were concentrated in a relatively small number of low-wage occupational and industrial niches – the largest 30 occupations and 25 industries each account for over half of recipients with work histories. Large numbers of aid recipients worked as cashiers, waiters, waitresses, and cooks in restaurants; as cleaners in private households and public buildings; as laborers at construction sites; and as nursing aides and orderlies in hospitals. In most of these occupations, aid recipients worked fewer hours per week and weeks per year than other workers. They also earned lower wages than other workers, in mostly non-union jobs that offer few, if any, benefits.

In addition to working in low-wage jobs, aid recipients face a surplus of workers in occupations for which they are most qualified in the Los Angeles region. Moreover, projected job growth in these occupations will be insufficient to meet the growing supply of workers. If welfare-to-work programs attempt to send workers back into these same occupations, the oversupply of workers may well depress wages, maintain high rates of job turnover, and frustrate attempts by aid recipients to build on-the-job skills and move into more stable, better-paying jobs.

Major Occupations and Industries of Aid Recipients

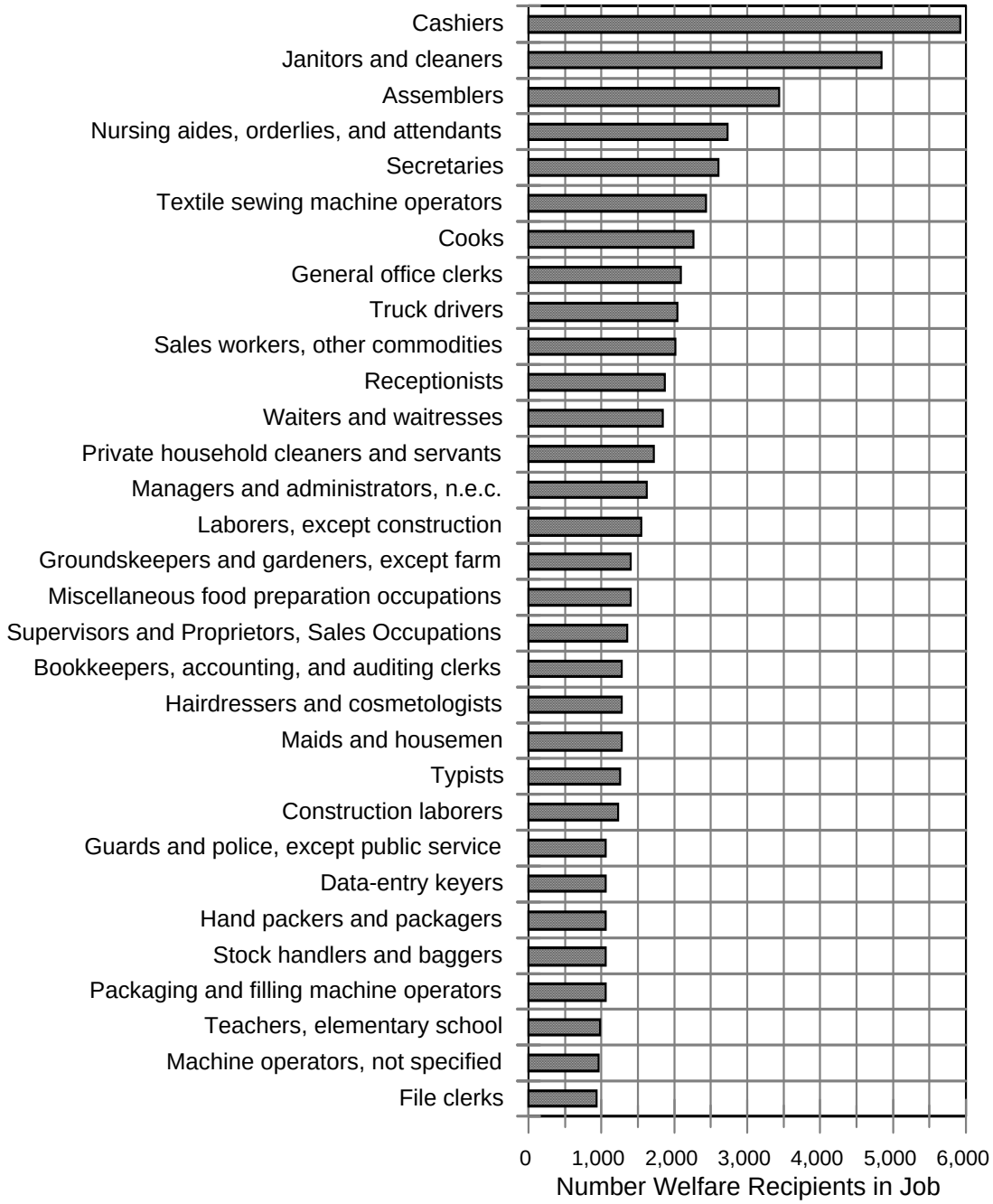
The occupational pattern of aid recipients resembles that of the overall Los Angeles labor market, although aid recipients are concentrated in the lower-skilled tier of occupations, and in the lower range of pay within each occupation.

Seventy-four percent of all working-age (16-64 years) welfare recipients in the county had work histories in 1990, according to PUMS data, and 59 percent had recent work experience (between 1985 and 1990). The largest occupations of aid recipients are

Figure 30

JOBS OF WELFARE RECIPIENTS

Biggest Occupations - LA County 1990



shown in Figure 30 and Table 11. The largest number of aid recipients – 5,908 (5.5 percent) -- worked as cashiers. After cashiers, the most common occupations were janitors and cleaners, assemblers, nursing aides and orderlies, and secretaries. Thirty-six percent of aid recipients worked in just 15 occupations shown here.

Table 11
Major Occupations of Aid Recipients in Los Angeles County

Occupation	Number of Workers	Percent of All Public Assistance Recipients Working in 1989
Cashiers	5,908	5.5
Janitors and cleaners	4,807	4.5
Assemblers	3,428	3.2
Nursing aides and orderlies	2,721	2.5
Secretaries	2,577	2.4
Sewing machine operators	2,401	2.2
Cooks	2,245	2.1
General office clerks	2,064	1.9
Truck drivers	2,029	1.9
Sales workers	2,000	1.9
Receptionists	1,839	1.7
Waiters and waitresses	1,825	1.7
Private household cleaners	1,696	1.6
Managers and administrators	1,605	1.5
Laborers	1,530	1.4

Source: US Department of Commerce, Bureau of the Census, 1990 Public-Use Microdata Samples, Los Angeles County

By comparison, the largest occupations of the total county workforce in 1998 are shown in Figure 31[2]. Four of the ten largest occupations also among the top ten occupations of aid recipients: general office clerks, sales workers, secretaries, and cashiers. Altogether, 19 of the 30 largest occupations in the county were also among the 30 largest occupations of aid recipients. Major occupations in the county that did not have a high concentration of aid recipients were in higher-wage managerial and professional fields. These included general managers; financial managers; marketing, advertising, and public relations managers; registered nurses; accountants and auditors; and secondary school teachers.

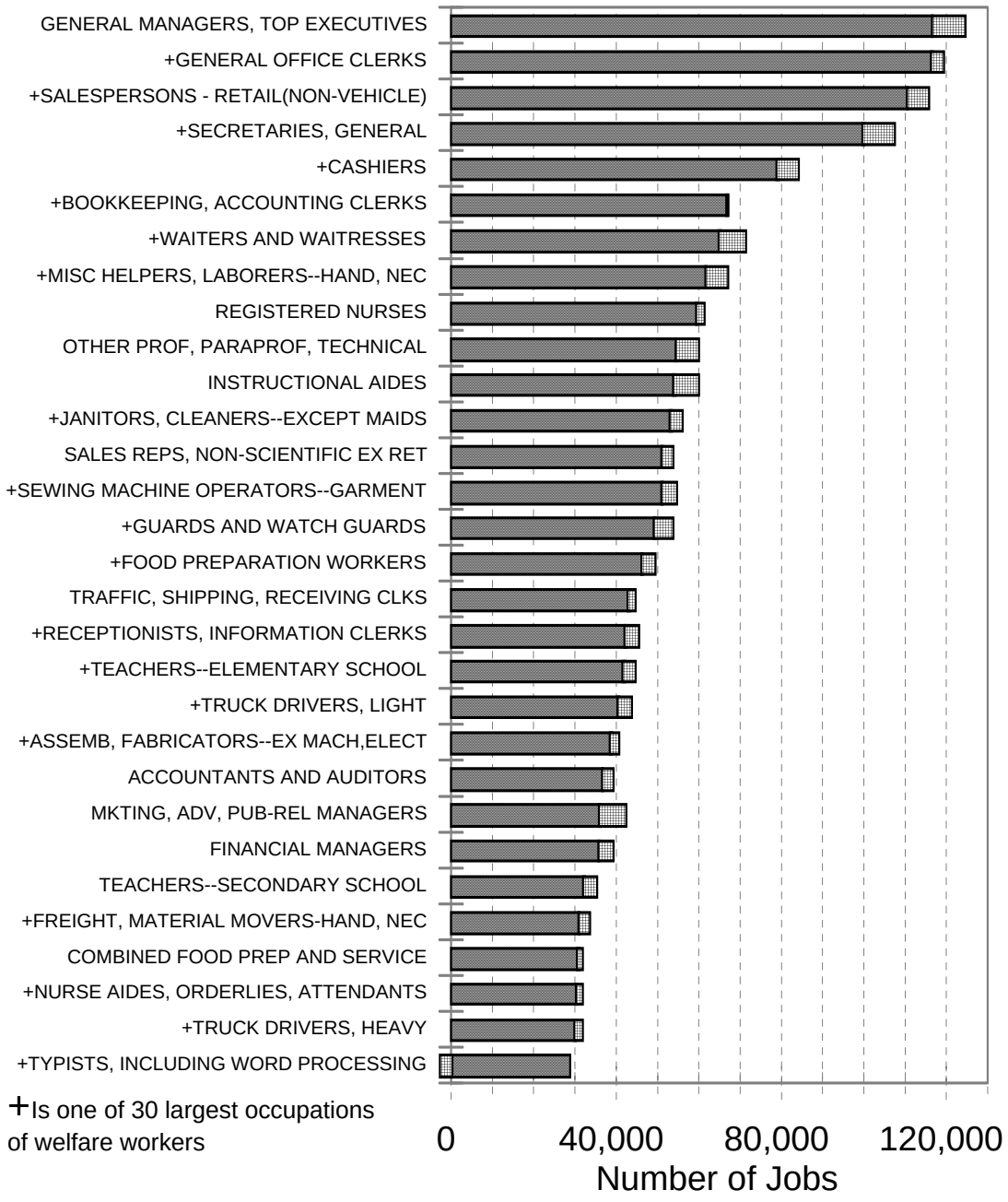
Table 12
Occupational Distribution of Aid Recipients and All Workers in Los Angeles County in 1990

	Aid Recipients		All Workers		Occupational Concentration Of Aid Recipients
Job Family	Number	*Percent*	Number	*Percent*	
Managerial and Professional	15,163	*14.1*	1,159,135	*27.6*	0.51
Sales	13,393	*12.4*	486,374	*11.6*	1.07
Administrative Support (Office)	20,731	*19.3*	730,744	*17.4*	1.11
Service	24,055	*22.4*	516,613	*12.3*	1.82
Production	31,964	*29.7*	1,116,713	*26.6*	1.12
ALL WORKERS	107,616		4,203,792		

Source: US Department of Commerce, Bureau of the Census, 1990 Census

Figure 31

BIGGEST 30 OCCUPATIONS-LA CO. 1998 AND PROJECTED GROWTH TO 2001



The concentration of welfare workers in job families (i.e., the broadest level of occupational groups) compared to the overall county workforce is shown in Table 12. An occupational concentration number higher than 1.0 indicates that aid recipients are more likely to find jobs in that job family than county workers in general. Relative to their proportion of the total workforce, aid recipients were most highly concentrated in service occupations. Among the service occupations, the highest concentrations of aid recipients were found in cleaning and building services (e.g. janitors), private household occupations (e.g. cleaners), and food service occupations (e.g. cooks and waiters), as shown in Figure 32 (which identifies occupational concentrations in specific occupations). Welfare workers were slightly over-represented in sales, office, and production occupations, and very under-represented in managerial and professional occupations.

Major industries that employed public assistance recipients are shown in Figure 33, and a complete table of employment by industry is provided in the Appendix. The most common industry of employment was eating and drinking places, which employed 7,870, or 7.3 percent, of the county's welfare workers. Industries employing the largest number of aid recipients were:

- Eating and drinking places
- Elementary, secondary schools
- Hospitals
- Apparel manufacturing
- Private households
- Department stores
- Grocery stores
- Building services
- Personnel supply services
- Real estate

The concentration of aid recipients relative to all workers in major industry sectors is shown in Table 13. Industry sectors with above-average concentrations of aid recipients included retail and wholesale trade, manufacturing, and professional services. Compared

Table 13
Industrial Distribution of Aid Recipients and All Workers in Los Angeles County, 1990

	Aid Recipients		All Workers		Industry Concentration of Aid Recipients
Industry	Number	*Percent*	Number	*Percent*	
Construction	4,719	*4.4*	246,580	*5.9*	0.75
Manufacturing	19,892	*18.9*	861,337	*20.5*	0.92
Transportation, Communications, Util.	5,756	*5.3*	289,005	*6.9*	0.77
Retail and Wholesale Trade	27,235	*25.3*	861,048	*20.5*	1.23
Finance, Insurance, Real Estate	5,215	*4.8*	327,998	*7.8*	0.62
Business Services	7,311	*6.8*	185,920	*4.4*	1.55
Personal Services	6,912	*6.4*	156,643	*3.7*	1.73
Professional Services	21,307	*19.8*	884,343	*21.0*	0.94
ALL WORKERS	107,616		4,203,792		

Figure 32

OCCUPATIONAL CONCENTRATION INDEX

LA County Welfare Workers 1990

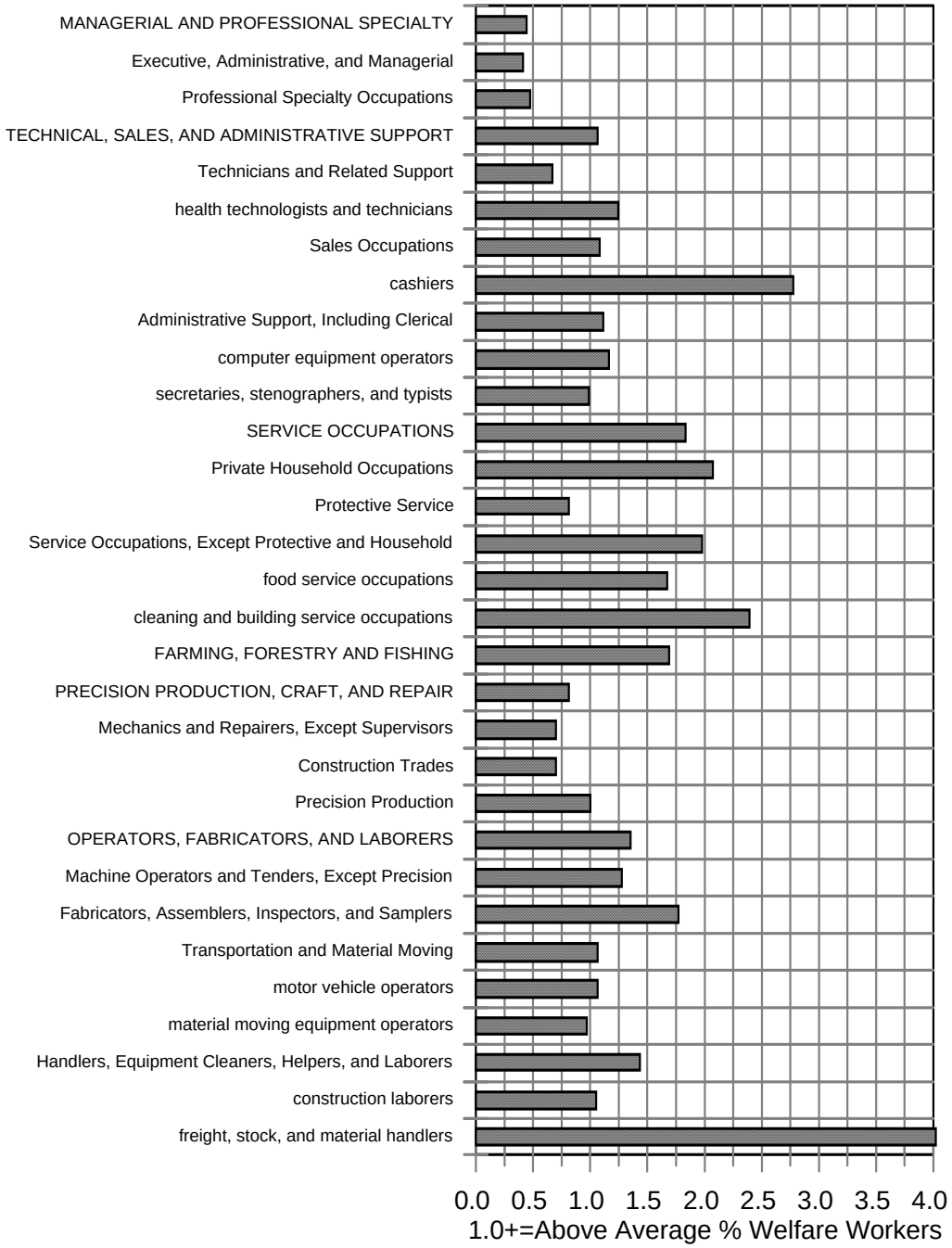


Figure 33

INDUSTRIES WITH MOST WELFARE WORKERS

L.A. County, 1990 PUMS Data

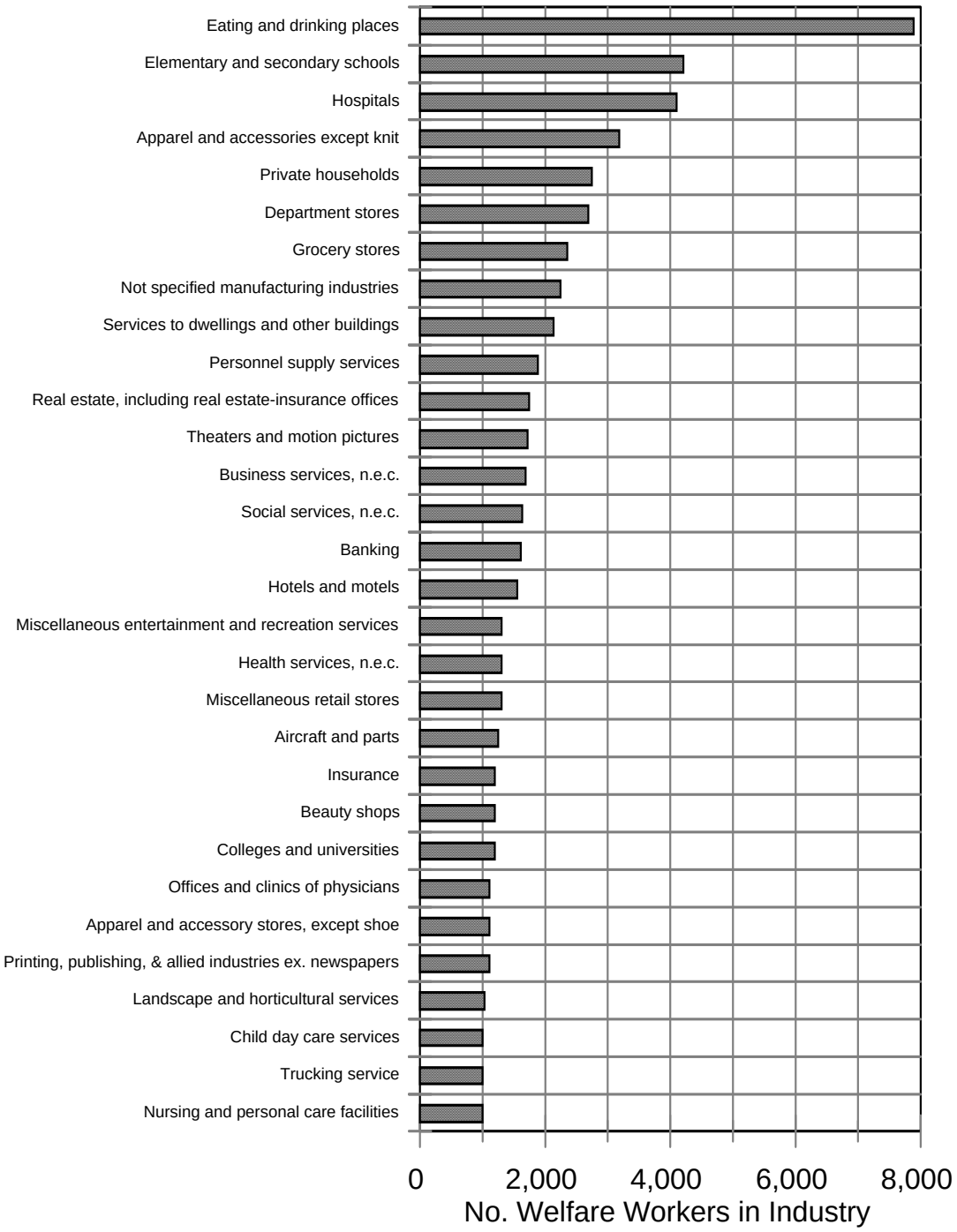
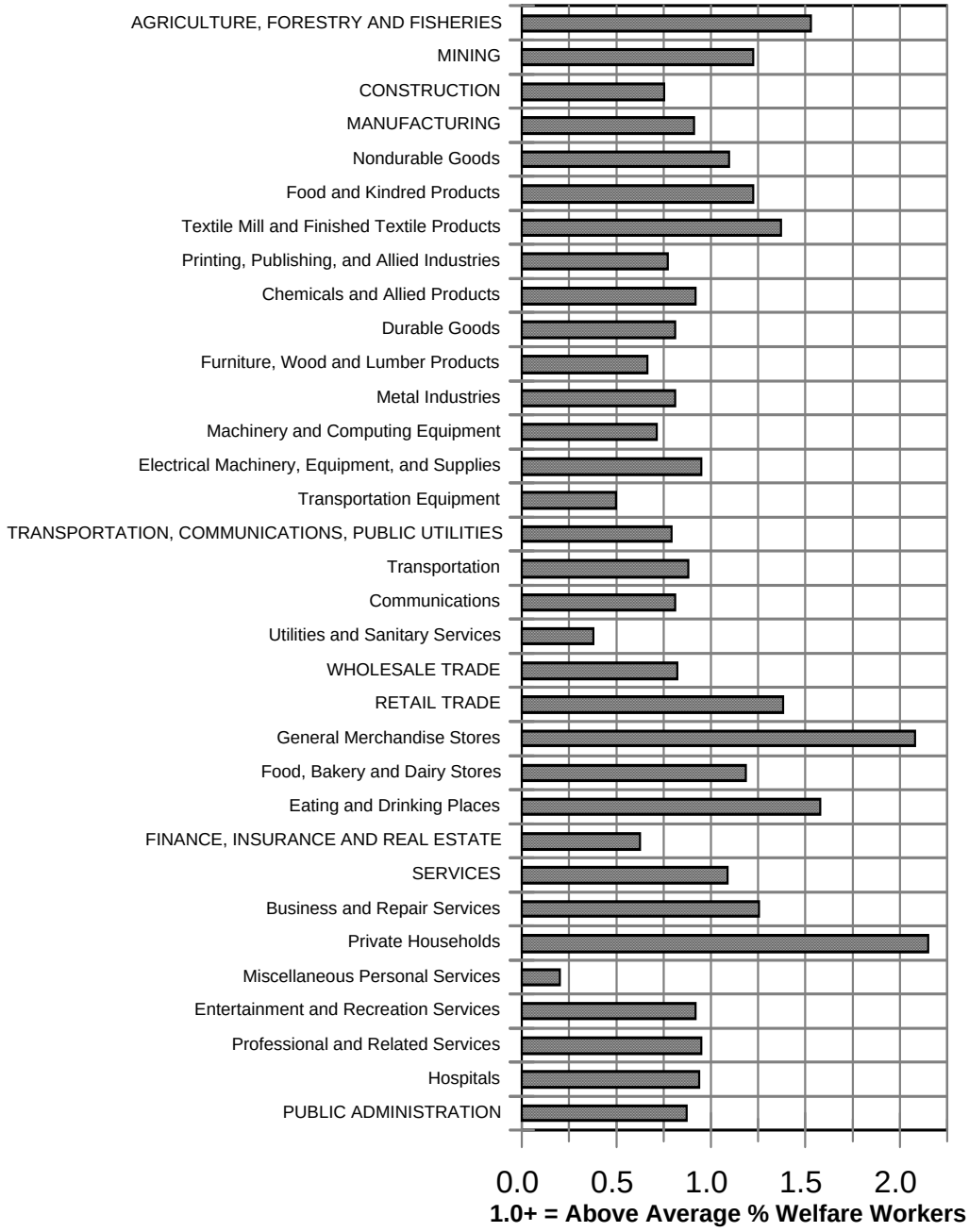


Figure 34

INDUSTRY CONCENTRATION INDEX

LA County Welfare Workers 1990



to all workers, aid recipients were significantly under-represented in finance, insurance, and real estate; construction; and transportation, communications, and utilities. The share of aid recipients and all workers was similar in manufacturing and professional services. Specific industries with higher concentrations of aid recipients included private households, general merchandise stores, eating and drinking places, business and repair services, and apparel manufacturing, as shown in Figure 34.

The occupational and industrial distributions of aid recipients were combined to produce the industry-occupation matrix shown in Table 14. The largest concentrations of welfare workers were found at points where the following occupations and industries intersect: sewing machine operators in apparel factories; cashiers, waiters, waitresses, and cooks in eating and drinking places; cleaners in private households and buildings; and hairdressers in beauty shops.

The cautionary value of these findings is that areas of the labor market with high concentrations of welfare workers may well offer diminishing returns for additional job placements. On the other hand, occupations and industries in which welfare workers are concentrated offer a point of departure for upgrading skills to meet competency requirements for better jobs in related career ladders and industries. Welfare-to-work employment programs can use this information about occupational and industry employment to develop targeted job training and placement services for upgrading the skills of welfare workers and helping them achieve mobility toward more promising occupations.

Occupational Distribution of Aid Recipients by Age, Gender, Ethnicity, and Education

The labor market offers a set of existing, though often very marginal, solutions for the employment needs of aid recipients. An understanding of these "default" solutions provides a benchmark for skill gains and employment outcomes that should be achieved by welfare-to-work programs to enable aid recipients to improve upon their work histories and become financially self-sufficient. This section provides information about typical employment outcomes for different age, gender, ethnic and education cohorts so that their employment status and needs can be seen in the context of the regional labor market.

Age

Occupations with the highest concentration of young welfare workers were stock handlers, cashiers, file clerks, data-entry keyers, and receptionists. Occupations with highest concentration of workers between the ages of 36 and 64 were managers and

TABLE 14 INDUSTRY-OCCUPATION MATRIX OF WELFARE EMPLOYMENT LOS ANGELES COUNTY -1990

OCCUPATION	Landscape & Horti.	Construction	Apparel	Other Mfg.	Urban Bus Serv.	Trucking Service	Department Stores	Grocery Stores	Apparel Stores	Eating & Drinking Pl.	Misc. Retail	Not Specified Retail	Banking	Real Estate	Serv. to Dwellings	Pers. Supply Serv.	Protective Serv.	Business Serv. n.e.c.	Private Households	Hotels & Motels	Beauty Shops	Misc. Entertainment	Physicians Offices	Hospitals	Nursing Care	Health Serv. n.e.c.	Elem. & Sec. School	Colleges & Univ.	Child Day Care Serv.	Family Child Care	Social Serv. n.e.c.
	INDUSTRY																														
Mgr., Food/Lodging										628										138		34					13	21			
Mgrs., n.e.c.	21	153	60	35				13	10		5		83	28			16	202						11			29		21		
Registered Nurses																16							113	464	29	117			13		13
Teachers, Elementary																											952				
Lic. Pract. Nurses																119			32					357	20						
Sales Wk., Apparel							37		583																						
Sales Wk., Oth. Com.							619				411	288										16				42		31			
Cashiers		24		34			580	786	118	1813	82	222		34						23		50					75	98			39
Secretaries		225	24	42			52			39	13	31		112		95		49					20	139		85	147	83	15		39
Typists		34	28			21					23		18	13		103	33	62					23	81			55	52			34
Receptionists	13	33	31			18	10			29	24		34	49				18			47	13	223	124		29	44	41			
File Clerks						25							57	41		109		49					18	76		44	26				42
Bookkeepers		40		49		13	21	36		62	21	30	94	29		68		21		16		20		16		53					
General Office Clerks	39	26				16	41				18		119	20		192		60		16			98	80		29	148	134			49
Bank Tellers													505																		
Household Cleaning																			1696												
Guards		18												52			491	18		98								26			
Waiters & Waitresses										1504										38		65		28	21						
Cooks				29				150		1327				26						23			13	103			213	10	28		39
Misc. Food Preparation							49	51		743												18		42			265	19			63
Nursing Aides															37	78			271				85	850	564	456	26		21		144
Maids & Housemen															237					720				229	42	26					
Janitors & Cleaners		44	50			16	76	21	36	190	18		42	117	1466	61		94		144	13	291		247	47	84	460	61			108
Hairdressers							19			32	21										1082										
Family Child Care Prd.																													650		
Early Child Tch. Asst.																											78		508		
Gardeners	904	149												24					48			59		31				19			
Carpenters		543																									18	26			
Sewing Mach. Oper.			1879	83																											
Assemblers		31	88	468							13				79	61		20				24		26			29				78
Truck Drivers		85	77		41	435		70		173	24							49				10									
Bus Drivers					595																						55				
Construction Laborers		1184																													
Stock Handlers							141	539			18					81															
Laborers, Ex. Const.	18		47	91		39	37	28		31				100	49	83		16				24			33						21

administrators, nursing aides, private household cleaners, sales supervisors and proprietors, and construction laborers.

Gender

Two in three aid recipients with recent work histories were female. Occupations with the highest concentration of female aid recipients were in clerical and sales specialties such as secretaries, receptionists, typists, data-entry keyers, and cashiers. At least 93 percent of the aid recipients who worked in these occupations were women. Occupations with the highest concentration of male aid recipients were construction laborers, groundskeepers and gardeners, truck drivers, guards, and miscellaneous food preparation workers. Over 90 percent of the aid recipients who worked as construction laborers and groundskeepers and gardeners were male, as were 84 percent of truck drivers, 61 percent of guards, and 57 percent of miscellaneous food preparation workers.

Ethnicity

Latinos were highly concentrated as textile sewing machine operators, other machine operators, hand packers, assemblers, packaging machine operators, and laborers. Also, over fifty percent of private household cleaners and maids were Latino.

Security guards had the highest concentration of Black aid recipients. Other service occupations with high concentrations of Blacks included nursing aides, janitors and cleaners. Office occupations with high concentrations of Black aid recipients included typists, file clerks, data-entry keyers, and general office clerks.

White aid recipients were highly concentrated in restaurant, clerical, and sales occupations, including waitresses, cashiers, secretaries, receptionists, bookkeeping clerks, sales workers and supervisors, and hairdressers and cosmetologists.

Education

The distribution of aid recipients by ethnicity and educational attainment is shown in Table 15. For purposes of this analysis college degrees include Associate of Arts, Bachelor of Arts or Sciences, and graduate degrees. Two in three Latinos did not have a high school degree, 19 percent had a high school degree and no college, and 16 percent had at least some college education. The educational profiles of White and Black recipients were relatively similar, with one major exception: Whites were twice as likely to have obtained a college degree. A similar percent of Whites and Blacks had not obtained high school degree (27 and 31 percent, respectively), and 30 percent of Blacks and 28 percent of Whites had a high school degree but no college education. The educational profile of Asians was bipolar: over half had not obtained a high school degree, but one in five had obtained a college degree.

Major occupations with the highest concentration of aid recipients without a high school degree are shown in Figure 35. They include:

- Sewing machine operators
- Handpackers
- Packaging machine Operators
- Maids and housemen
- Other machine operators
- Private household cleaners

Table 15
Distribution of Aid Recipients by Ethnicity and Educational Attainment

ETHNICITY	No High School	Some High School	High School Diploma	Some College	College Degree	Total
Latino	*33%*	*32%*	*19%*	*10%*	*6%*	34%
White	*6%*	*22%*	*28%*	*23%*	*21%*	32%
Black	*4%*	*28%*	*30%*	*27%*	*11%*	27%
Asian	*30%*	*22%*	*15%*	*14%*	*19%*	7%
Total	*16%*	*27%*	*25%*	*19%*	*13%*	100%

Source: US Depart. of Commerce, Bureau of the Census, 1990 PUMS

This group of jobs with the highest concentrations of welfare workers without high school diplomas is among the least promising of all the occupations examined in this study. An important priority of welfare-to-work programs should be to provide education and training for aid recipients in these occupations who have the potential to hold more highly skilled jobs so that they will be able to rise above poverty and become economically self-sufficient.

Figure 35
OCCUPATIONS WITH THE HIGHEST CONCENTRATION OF AID RECIPIENTS WITHOUT A HIGH SCHOOL DEGREE

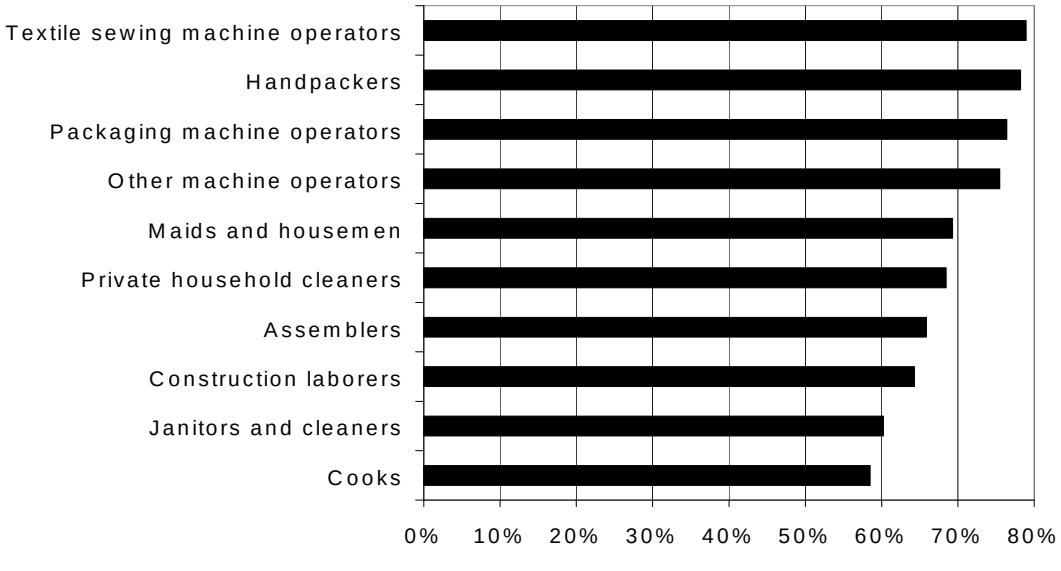


Figure 36
OCCUPATIONS WITH THE HIGHEST CONCENTRATION OF AID RECIPIENTS WITH A HIGH SCHOOL DEGREE

Major occupations with the highest concentration of aid recipients with a high school degree are shown in Figure 36. They include:

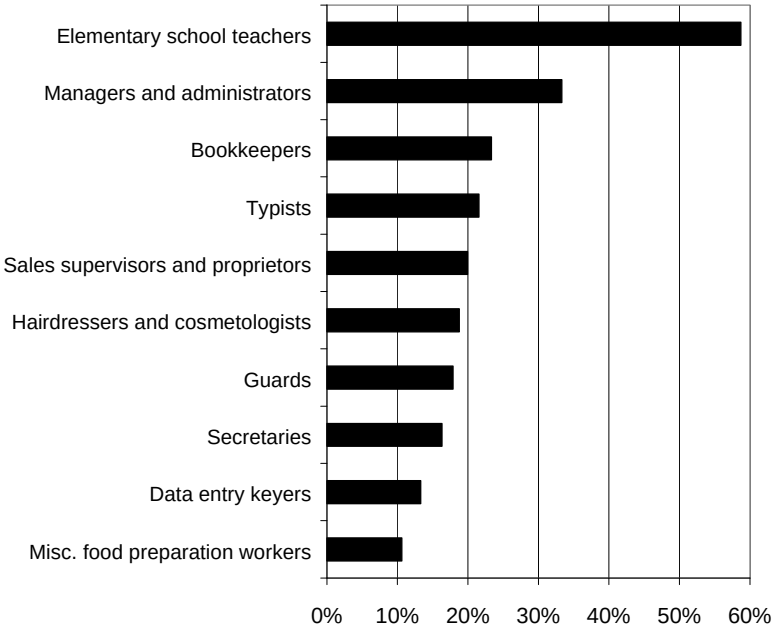
- Data entry keyers
- Receptionists
- Stock handlers
- File clerks
- Typists
- Office clerks

Major occupations with the highest concentration of aid recipients with a college degree are shown in Figure 37. They include:

- Elementary school teachers Managers
- Bookkeepers
- Typists
- Sales supervisors
- Hairdressers

Education by itself does guarantee a better job, but there is a clear progression toward jobs with higher earnings among groups of better educated welfare workers.

Figure 37
OCCUPATIONS WITH THE HIGHEST CONCENTRATION OF AID RECIPIENTS WITH A COLLEGE DEGREE



Employment and Earnings of Aid Recipients in Major Occupations

It is important to understand the earnings and employment outcomes produced by different occupations. The previous section discussed the types of jobs different groups of workers are able to obtain. This section looks at occupations producing the best and worst earnings and employment outcomes for welfare workers.

Two groups of aid recipients at opposite ends of the spectrum of relative labor market success were identified, similar to the lowest- and highest-risk work-readiness groups identified in Chapter 5. The two groups were defines as:

Figure 38
OCCUPATIONS WITH HIGHEST CONCENTRATION OF AID RECIPIENTS WITH SIGNIFICANT EARNINGS

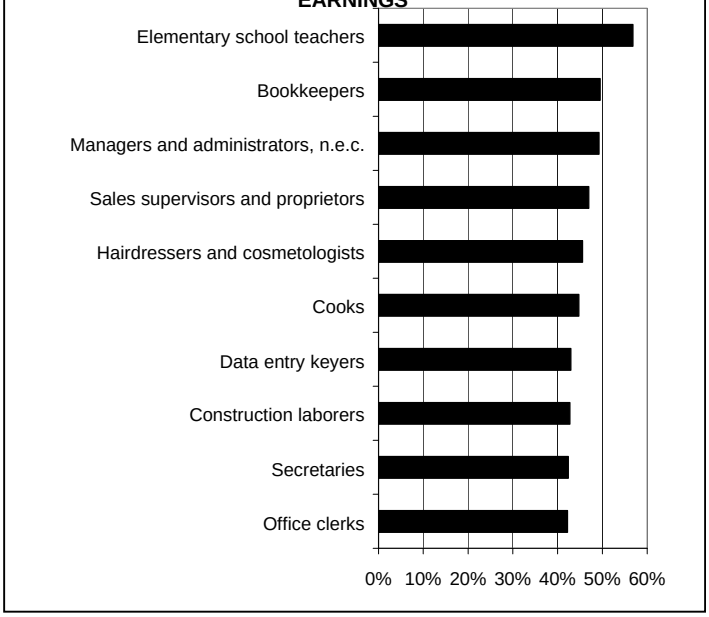
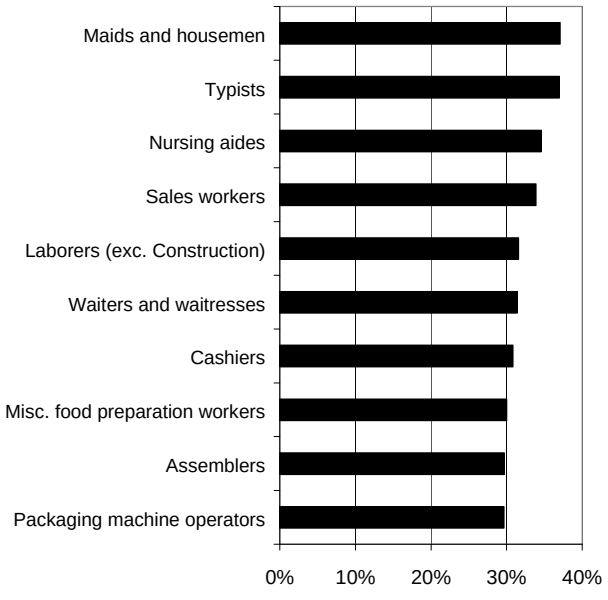


Figure 39
OCCUPATIONS WITH HIGHEST CONCENTRATION OF LONG-TERM UNEMPLOYED AID RECIPIENTS



- *Significant earnings* -- aid recipients who worked in 1989 and earned at least $2,400.

- *Long-term unemployed* -- Aid recipients who had last worked before 1988, or never worked.

Major occupations that had the highest percent of aid recipients with significant earnings are shown in Figure 38. (It should be noted that this figure shows occupations with the highest percent of welfare

workers with significant earnings, rather than occupations with the largest number of workers as was shown earlier in Figure 19.) Most of these highest paying jobs were in professional and office occupations, including:

- Elementary school teachers
- Bookkeepers
- Managers and administrators
- Sales supervisors and proprietors

Major occupations that had the highest percent of long-term unemployed aid recipients are shown in Figure 39. This groups is dominated by service and manufacturing occupations, including:

- Maids
- Typists
- Nursing aides and orderlies
- Sales workers

Occupations producing the best and worst earnings and employment outcomes closely overlap those held by welfare workers with the highest and lowest levels of education.

Average Earnings and Hours of Welfare Workers in Major Occupations

Recipients of public assistance who worked in 1989 were disproportionately concentrated in relatively few low-wage occupations. The PUMS data set includes 56,191 persons between the ages of 16 and 64 who worked in 1989 and also received public assistance income. This represented 52 percent of all aid recipients reporting an occupation. One in three welfare workers were found in the fifteen occupations employing the most aid recipients that are listed in Table 16.

Table 16
Major Occupations of Public Assistance Recipients Working in 1989

Occupation	Number of Welfare Workers	Percent of All Public Assistance Recipients Working in 1989
Cashiers	2,858	5.1
Janitors and cleaners	2,493	4.4
Assemblers	1,473	2.6
Secretaries	1,395	2.5
Cooks	1,342	2.4
Nursing aides and orderlies	1,248	2.2
General office clerks	1,116	2.0
Sewing machine operators	1,063	1.9
Receptionists	1,019	1.8
Waiters and waitresses	875	1.6
Household cleaners	841	1.5
Hairdressers and cosmetologists	770	1.4
Bookkeepers	769	1.4
Sales supervisors and proprietors	716	1.3
Sales workers	706	1.3

Source: US Department of Commerce, Bureau of the Census, 1990 Public-Use Microdata Samples, Los Angeles County

The average weekly earnings of aid recipients who worked in 1989 are compared with the earnings of all workers in the county

labor force in each of the fifteen occupations listed above in Figure 40. Earnings are given in 1998 dollars, although it is not clear that earnings in these occupations have kept pace with the Consumer Price Index. In each occupation, welfare workers had significantly lower weekly earnings than those of the average county worker. Much of the earnings gap results because welfare workers had fewer hours of work per week than did the average worker in these occupations. For example, aid recipients who worked as cashiers earned an average of $103 per week, or one-half of the average of $202 earned by all cashiers, and worked an average of 12.6 hours per week, compared to the average of 22.8 hours per week for all cashiers.

Figure 40
AVERAGE WEEKLY EARNINGS BY OCCUPATION
Aid Recipients and All Workers

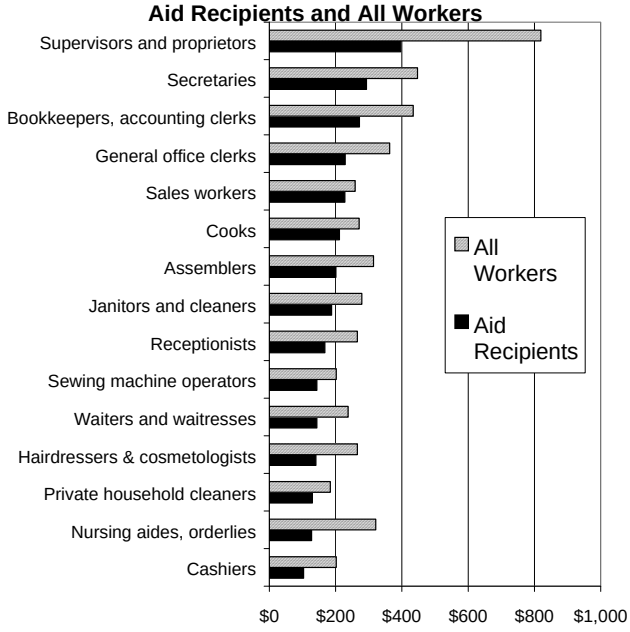


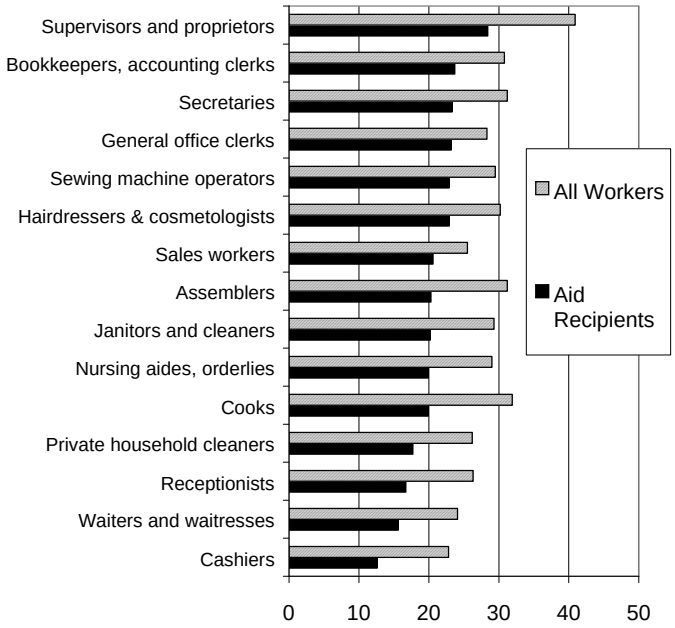
Table 17
Average Weekly and Annual Earnings for All Workers In Major Occupations of Aid Recipients

Occupation	Average Weekly Earnings ($1998)	Full-time, Full-year Annual Earnings ($1998)
Sales supervisors and proprietors	$819	$40,958
Secretaries	447	22,353
Bookkeepers	434	21,716
General office clerks	363	18,155
Nursing aides and orderlies	321	16,043
Assemblers	314	15,716
Janitors and cleaners	279	13,955
Cooks	271	13,551
Hairdressers and cosmetologists	266	13,293
Receptionists	266	13,283
Sales workers	259	12,947
Waiters and waitresses	238	11,882
Sewing machine operators	202	10,084
Cashiers	202	10,082
Private household cleaners	184	9,201

Source: US Department of Commerce, Bureau of the Census, 1990 Public-Use Microdata Samples, Los Angeles County

The average weekly earnings of aid recipients ranged from a high of $397 for sales supervisors and proprietors, to a low of $103 for cashiers. The average weekly earnings of aid recipients as a

Figure 41
AVERAGE HOURS WORKED PER WEEK
BY OCCUPATION
Aid Recipients and All Workers



to a 50-week work year. Earnings are shown in estimated 1998 dollars based on increases in the Consumer Price Index.

The lower weekly earnings of aid recipients were largely the result of having fewer hours of work per week compared to other workers in each occupation (see Figure 41). The average number of hours per week worked by aid recipients ranged from a low of 32 percent of the average weekly earnings of all workers in the same occupation to a high of 88 percent for sales workers.

Aid recipients were bringing home even lower earnings than all other workers in these occupations, who themselves had low earnings. Table 17 shows the average weekly earnings of *all* workers (welfare and non-welfare) in Los Angeles County in the major occupations of aid recipients, as well as the annual salary corresponding

Table 18
Wages Offered to Newly-Hired Workers in Los Angeles County

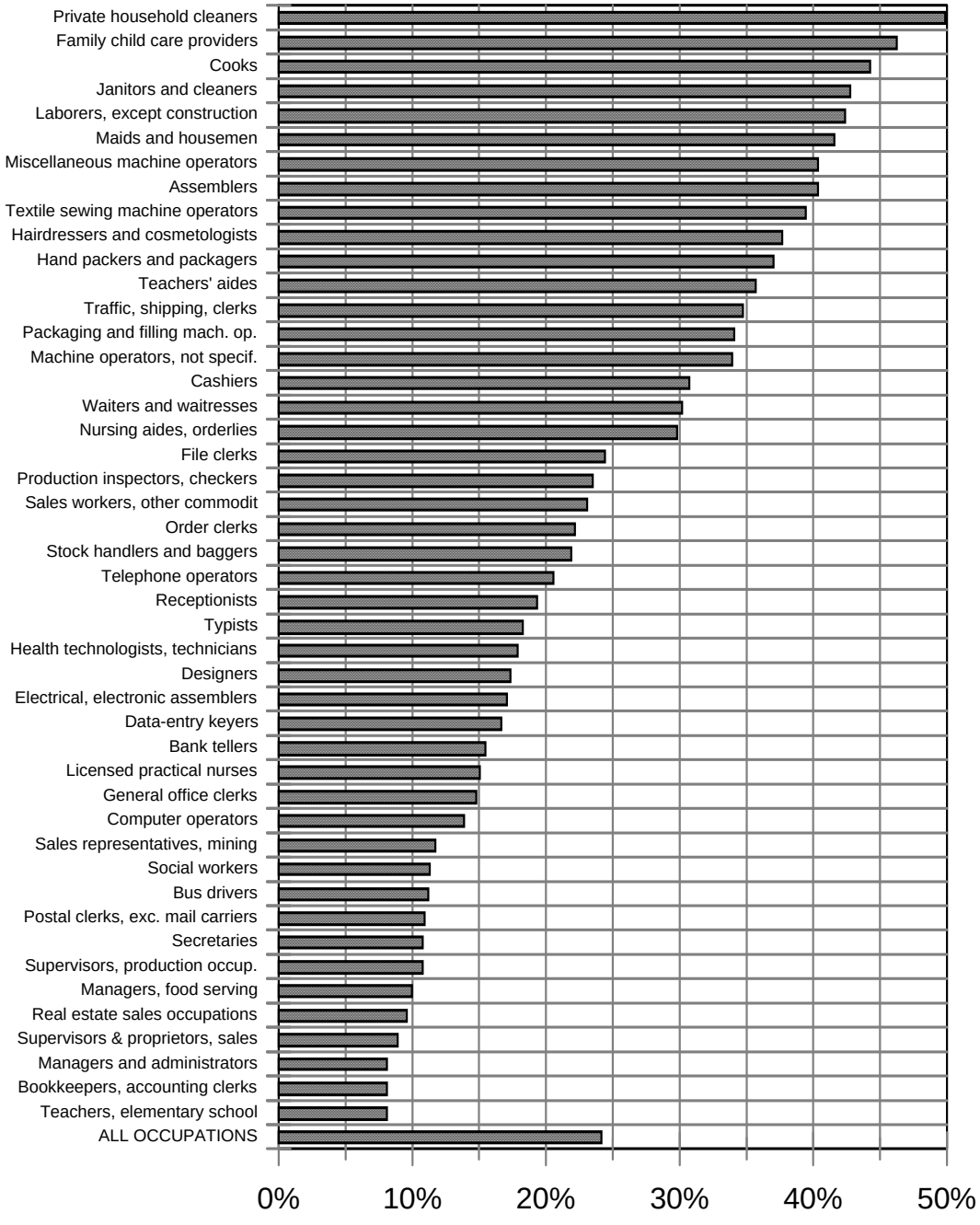
DOT Occupation Title	Median Wage in LA County (1994)	Full-time, full-year annual earnings
Assembler, production	$6.00	$12,000
General clerk	6.00	12,000
Nurse assistant	5.85	11,700
Short-order cook	5.50	11,000
Housekeeping cleaner	5.00	10,000
Assembler, small products	5.00	10,000
Salesperson, general merchandise	5.00	10,000
Cashier	4.85	9,700
Sewing machine operator	4.50	9,000
Fast-food cook	4.50	9,000
Cashier-checker	4.38	8,760
Waiter/waitress	4.25	8,500
Assembler, electrical	4.25	8,500

Source: California Employment Development Department job listings, Los Angeles County, 1994.

Figure 42

WORKERS WITH INCOMES BELOW POVERTY

Women 16-64, No Public Assistance



recipients ranged from a high of 28.4 for sales supervisors and proprietors, to a low of 12.6 for cashiers. The average weekly hours worked per week by aid recipients as a percent of hours worked by all workers ranged from a low of 55 percent for sales supervisors and proprietors, to a high of 82 percent for janitors and cleaners.

Further evidence of the low wages paid in the major occupations of aid recipients is provided in Table 18. This shows the median wage offered to new hires in several occupations in which aid recipients are likely to seek work. This wage information is from the Employment Development Department's job listings for Los Angeles County in 1994. Median wages ranged from $4.25 to $6.00 an hour.

The full-time, full-year earnings *significantly overstate* the actual average earnings of aid recipients in these occupations because averages do not reflect the skewed, low-end nature of jobs held by many welfare workers. With the exception of sales supervisors and proprietors, the average weekly hours of *all* workers in these occupations ranged from 22.8 (cashiers) to 31.9 (cooks). The poverty rates of working-age women *not* receiving public assistance (in occupations that account for nearly two-thirds of welfare workers) are shown in Figure 42. An average of one in four non-welfare workers and job seekers in these occupations had incomes below the poverty level. The highest concentrations of workers with incomes below the poverty level were in service and manufacturing jobs. Many of these occupations offer poor prospects for financial survival.

These data, we believe, accurately represent the precarious labor market situation of working aid recipients in Los Angeles County's welfare caseload. These working recipients are the most "work-ready" group in the welfare caseload; roughly three-quarters of the caseload had no current earnings shown in 1990 PUMS data. It is a difficult challenge to help this group of already-employed aid recipients become self-sufficient in the labor market, and a far more difficult challenge to help long-term unemployed aid recipients obtain stable jobs. Part of the solution will be to help aid recipients move beyond this group of occupations characterized by low wages and job instability.

Labor Market Trends: Labor Supply, Labor Demand, and Projected Job Growth in Major Occupations of Aid Recipients

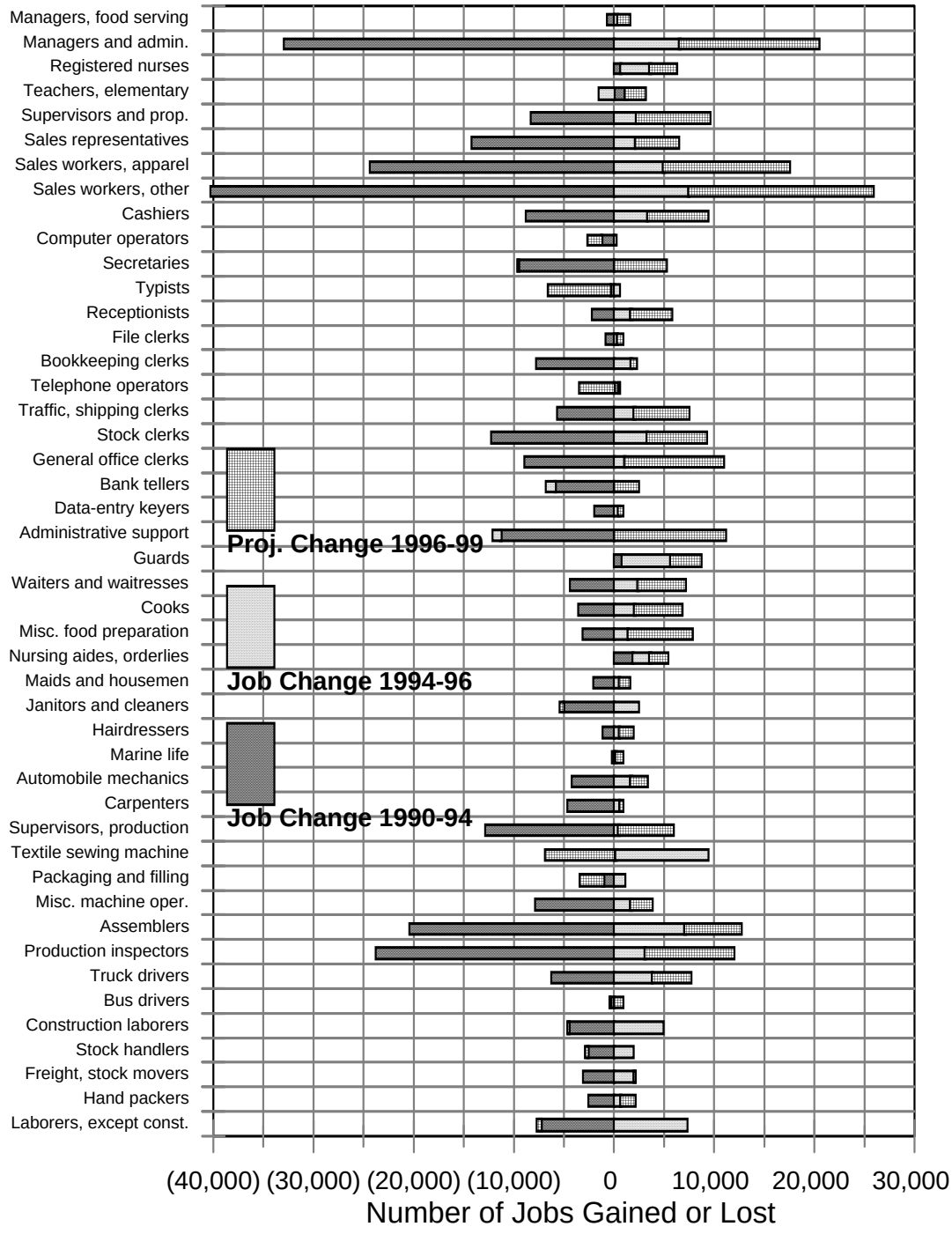
General Trends

Over the past decade Los Angeles County has experienced significant growth in the number of low-skilled jobs and supply of low-skilled workers in its labor market. This economic restructuring and the current over-supply of low-skilled workers affects the

Figure 43

JOB TRENDS - MAJOR WELFARE OCCUPATIONS

Los Angeles County 1990-99



prospects of aid recipients for finding stable, family-supporting employment (see discussion in Chapter 7).

The only major industrial sector to show substantial job growth between 1990 and 1997 has been the diverse service sector, characterized by a mix of high-wage and low-wage jobs. On the one hand, high-wage jobs have been created in the growing motion pictures, multimedia, and computer services industries. On the other hand, low-wage jobs have been created in personal services and business services. The overall impact of these trends is a growing polarization of the Los Angeles labor market between high-wage and low-wage jobs[3].

Since the 1970s, the Los Angeles region has undergone a remarkable demographic transition due to international immigration from Mexico, Central America, and East Asia. New immigrants have provided a low-wage labor force for diverse industries in Los Angeles County, including labor-intensive manufacturing, retail, and services. Most have lacked the formal educational qualifications required for entry into most high-wage jobs. Over half of all international immigrants in Los Angeles in 1990 did not have high school degrees, and one in eleven had no formal education.

Domestic in-migrants between 1985-90 were better educated than domestic out-migrants: 31 percent of in-migrants had a college degree, compared to 22 percent of domestic out-migrants[4]. As a result, the educational profile of Los Angeles County residents has shown a growing polarization comparable to that of the labor market, with steadily shrinking middle ground between marginally surviving workers at one extreme and relatively affluent professionals and business managers at the other extreme. The proportions of residents without a high school degree, and those with some college education or a college degree, both grew between 1980 and 1990.

Occupational Trends

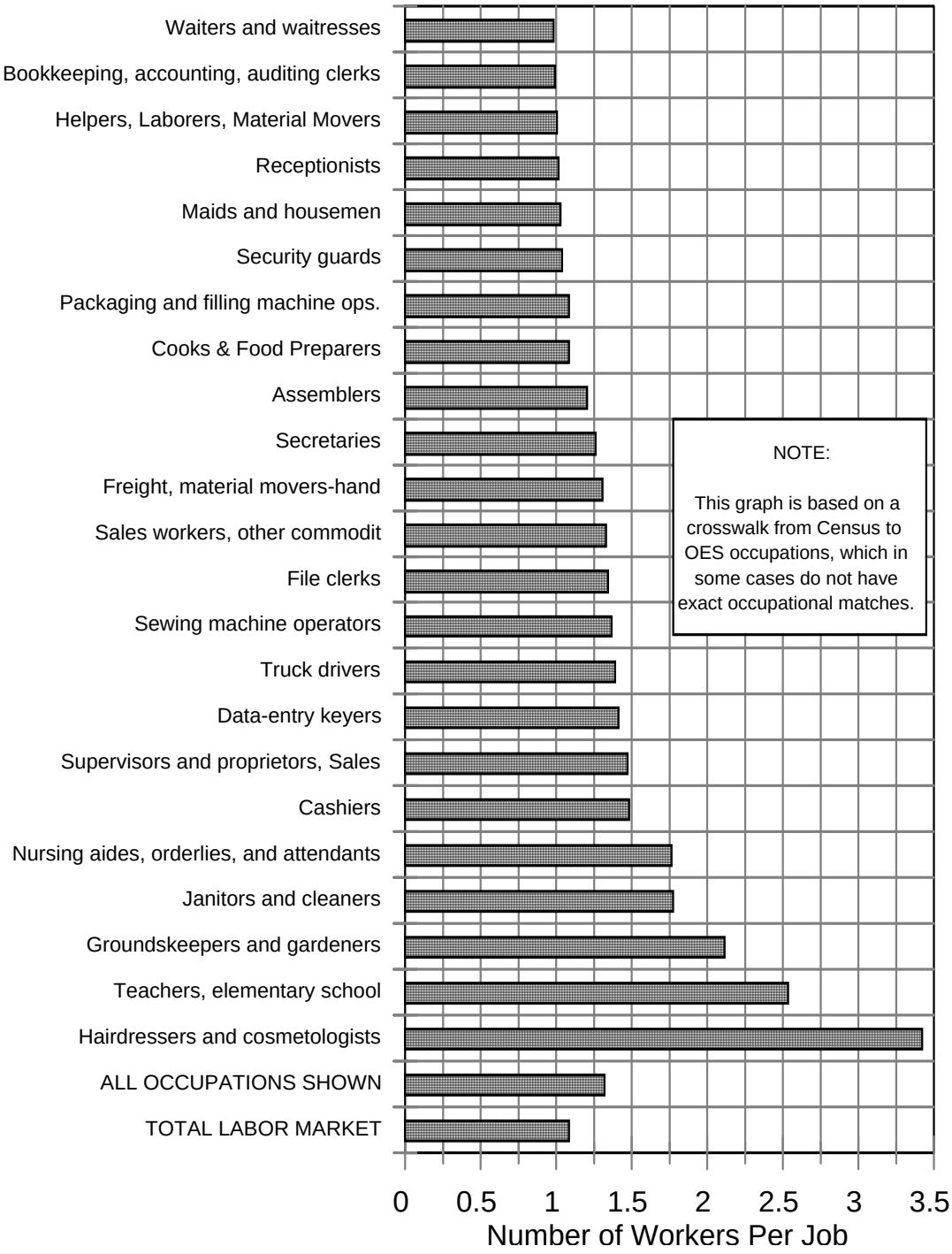
The number of jobs gained or lost by occupation between 1990-94 (the recent recession), 1994-96 (the early stages of recovery from the recession), and 1996-99 (projected) are shown in Figure 43. Occupations shown in Figure 43 account for two-thirds of employment among aid recipients with work histories. Major occupations of aid recipients expected to gain jobs between 1990 and 1999 include receptionists, general office clerks, waiters and waitresses, cooks, nursing aides and orderlies, hairdressers and cosmetologists, and textile sewing machine operators. Occupations that are expected to have about the same number of jobs in 1999 as in 1990 include sales supervisors and proprietors and cashiers. Occupations that have lost jobs between 1990 and 1998 include sales workers, bookkeepers, janitors and cleaners, and assemblers.

While several occupations are showing expanding employment, job growth has not kept pace with the growth of the total labor force. In most of the major occupations of aid

Figure 44

RATIO OF WORKERS TO JOBS IN L.A.

Occupations with Most Welfare Workers



recipients, there exists a surplus of potential workers relative to the number of jobs available in Los Angeles County. These occupations are therefore characterized by relatively high rates of unemployment. In several occupations, jobs gained since 1994 have not replaced the jobs lost during the recession years of 1990-94.

The ratio of workers to jobs in major occupations reported by aid recipients in Los Angeles County is shown in Figure 44. This was calculated by taking the ratio between the total workforce in each occupation recorded in the 1990 Census, and the total number of jobs reported by the California Employment Development Department (in OES codes, a similar but not identical job classification system) for Los Angeles County in 1990. In several occupations, the ratio of workers to jobs exceeds 1.5: hairdressers and cosmetologists, elementary school teachers, groundskeepers and gardeners, janitors and cleaners, and nursing aides and orderlies. Several other occupations reported a surplus of workers to jobs of between 1.25 and 1.49: cashiers, sales supervisors and proprietors, data-entry keyers, truck drivers, sewing machine operators, file clerks, sales workers, freight and material movers, and secretaries. A roughly equal match in the number of workers and jobs is shown for waiters and waitresses, but as shown earlier, these jobs provide an average of only 24 hours of employment per week, and workers typically need to hold down more than one of these jobs at a time to survive. (See the Appendix for a table showing detailed occupational trend data and number of job applicants by occupation.)

Occupational Assessment

Current welfare reform initiatives seek to move most public assistance recipients into the workforce. If these initiatives do not help aid recipients move beyond occupations in which they have typically worked and enter new, higher-skilled, better-paid fields of work, the overall prospects for success will be bleak. There are too many workers in Los Angeles County competing for too few low-skill jobs. (See Chapter 9 for additional discussion of these issues.)

The major occupations of aid recipients are assessed based on their earnings potential and job growth in Figure 45 to identify those offering the best prospects for job security and a living wage. The Appendix includes tables identifying additional occupations that are potentially accessible to aid recipients, and a forthcoming Economic Roundtable report will describe essential competencies and labor market conditions for occupations offering improved prospects for aid recipients. Five criteria for job quality are used in Figure 45 to assess occupations:

- A high percent of recipients in the occupation had significant earnings in 1989
- An average of at least 30 hours worked per week by aid recipients in 1989
- Below-average unemployment rate
- Fewer than 12 percent of workers below the poverty level
- Projected job growth between 1990 and 1999

Figure 45
PRELIMINARY ASSESSMENT OF OCCUPATIONAL STRENGTHS AND WEAKNESSES
Occupations Employing the Most Aid Recipients

OCCUPATION	*High Percent With Significant Earnings*	*30+ Average Hours Worked per Week*	*Below Average Unemployment*	*12% or Less of Workers Below Poverty Level*	*Job Growth 1990-99*
Managerial and Professional					
Managers and administrators	■	■	■	■	
Elementary school teachers	■	■	■	■	■
Sales					
Sales supervisors/proprietors	■	■		■	■
Sales workers					
Cashiers					■
Admin. Support (Office)					
Secretaries	■	■	■	■	
Typists					
Receptionists					■
File clerks					
Bookkeepers	■	■	■		
General office clerks	■		■		■
Data-entry keyers	■		■		
Service					
Private household cleaners					
Guards		■		■	■
Waiters and waitresses					■
Cooks	■				■
Misc. food preparation					■
Nursing aides and orderlies					■
Maids and housemen					
Janitors and cleaners					
Hairdressers & cosmetologists	■		■		■
Production					
Sewing machine operators					■
Packaging machine operators					
Other machine operators		■			
Assemblers					
Truck drivers		■			■
Construction laborers	■				■
Stock handlers					
Hand packers					
Laborers					
Other					
Groundskeepers and gardeners		■			

Occupations with one or no positive indicators include:

- Sales workers
- Cashiers
- Typists
- Receptionists
- File clerks
- Private household cleaners
- Waiters and waitresses
- Misc. food preparation
- Nursing aides and orderlies
- Maids and housemen
- Janitors and cleaners
- Sewing machine operators
- Packaging machine operators
- Other machine operators
- Assemblers
- Stock handlers
- Hand packers
- Laborers
- Groundskeepers and gardeners

Welfare-to-work employment programs should not encourage aid recipients to enter these occupations unless there are strong circumstances in individual cases supporting entry into these jobs. The assessment of major occupations employing welfare workers in Figure 45 identifies significant shortcomings in a number of other occupations. Those working with aid recipients to help them find employment should carefully consider the ramifications of encouraging individuals to enter occupations that typically provide less than thirty hours of work per week, have high unemployment rates, or are not growing in the regional labor market. The final chapter of this report provides specific recommendations about employment and training strategies for different work-readiness groups of aid recipients.

Summary of Findings

- Relative to their proportion of the total workforce, aid recipients are highly concentrated in service occupations, especially in cleaning and building services (e.g. janitors), private household occupations (e.g. cleaners), and food service occupations (e.g. cooks and waiters).

- Industry sectors with above average concentrations of aid recipients include retail and wholesale trade, business services, and personal services. Compared to all workers, aid recipients are significantly under-represented in finance, insurance, and real estate; construction; and transportation, communications, and utilities.

- Occupations that had the highest percent of long-term unemployed aid recipients included: maids, typists, nursing aides and orderlies, and sales workers.

- Average weekly earnings of aid recipients as a percent of average weekly earnings of all workers in the same occupation ranged from a low of 40 percent for nursing aides and orderlies, to a high of 88 percent for sales workers.

- The average weekly hours worked per week by aid recipients as a percent of hours worked by all workers ranged from a low of 55 percent for sales supervisors and proprietors, to a high of 82 percent for janitors and cleaners.

- An average of one in four *non-welfare* workers and job seekers had incomes below the poverty level in major occupations employing aid recipients.

- Many of the occupations with high concentrations of welfare workers have fewer jobs now than they had in 1990, and the number of workers and job seekers in many occupations significantly exceeds the number of jobs actually available.

- An assessment of 31 occupations employing the largest number of aid recipients based on earnings, hours of work, unemployment rates, percent of workers below the poverty level, and projected job growth identified 19 occupations with one or no positive indicators.

- Higher educational attainment increases the likelihood of employment in higher-wage managerial, professional, sales, and office occupations and of obtaining significant earnings for aid recipients.

- The "Jobs First" strategy that guides the county's primary welfare employment program, GAIN, is based on quick employment and reductions in the amount of welfare benefits paid to recipients, the majority of whom remain on welfare. Significant investments in skill development and access to new, better-paid occupations are needed to enable most recipients in the county's welfare caseload to become financially self-sufficient before their five-year lifetime limit on aid benefits is exhausted.

Notes

[1] Manpower Demonstration Research Corporation, ***Changing to a Work First Strategy: Lessons from Los Angeles County's GAIN Program for Welfare Recipients***, March 1997, page 21.

[2] Occupational employment for Los Angeles County in 1998 was calculated using Employment Development Department occupational projections from 1994 through 2001, which were released in 1998. Projected occupational growth for this seven-year interval was divided into annual increments, and four annual increments of change were added to the 1994 base year employment established for each occupation in the projections.

[3] For an analysis of income distribution, see Deborah Reed, Melissa Glenn Haber, and Laura Mameesh, ***The Distribution of Income in California***, Public Policy Institute of California, 1996.

[4] Southern California Association of Governments, ***Migration in the Southern California Region***, 1996, p. 23.

Chapter 9
Job Outlook for Aid Recipients

Two approaches are used in this chapter to evaluate constraints facing adult welfare recipients seeking regular employment that will adequately support their families without welfare grants. The first examines employment trends in occupations in which welfare recipients have worked in the past. The second examines employment trends and wage rates in occupations that require one year or less of training, and which tend to match the training and education of most adults receiving welfare benefits.

First Occupational Model: Trends in Occupations Typical of Welfare Recipients in 1990 PUMS Data

This section examines the outlook for successful participation by welfare recipients in the labor market. Four principal data groups are: (1) 1990 PUMS data describing characteristics of welfare recipients in relation to their past experience in the labor market; (2) characteristics of AFDC recipients from studies conducted by the University of California (UCB) using data from the California Department of Social Services (DSS); (3) the Los Angeles County Department of Public Social Services (DPSS); and (4) historical occupational employment data and projections from the Employment Development Department (EDD).

The 1990 PUMS file provides information on the work history of persons receiving public assistance income. An analysis was presented in Chapter 5 of single mothers ages 18 to 64, with their own children under 18 years of age present in the home, and having no disabilities that would prevent them from working. The principal occupations cited by this population in the 1990 Census are used for the analysis that follows.

To match available occupational employment trend data to the occupations reported by these welfare recipients, a conversion was made between 1990 Census occupational codes and Occupational Employment Statistics (OES) survey codes used by EDD to track employment trends by occupation. (See a discussion of the census and OES occupational coding systems in the Appendix.) In the following analysis, only the 1990 Census occupational categories in which at least 100 welfare recipients had work experience were used. These occupations together accounted for 87 percent of all the aid recipients reporting work experience.

Table 19

Jobs in Which Welfare Recipients Have Experience

Employment Trends* for Occupations in Which
At Least 100 or More Women, Aged 18-64, Receiving Public
Assistance, with Children Under 18, with No Disabilities,
And Who Reported Work Experience in the 1990 Census
Los Angeles County, 1990, 1994, 1996, 1999

Description	Employment Or Job Applicants
Annual average employment, 1990……	3,057,900
Annual average employment, 1994……	2,742,200
Employment change 1990-1994……	-315,700
Annual average employment, 1996……	2,803,200
Employment change 1994-1996……	61,000
Projected employment 1999……	3,006,600
Projected employment change 1996-1997……	203,400
Average annual new jobs 1996-1999……	67,800
Annual openings for replacement……..	79,000
Total annual openings……..	146,800
Welfare job applicants……	147,453

*All employment data produced by the Employment Development Department

Table 19 shows EDD occupational information that has been converted to Census occupational codes, and shows a summary of estimated employment for 57 different occupations employing the largest number of aid recipients. Employment estimates are shown for the years 1990, 1994, and 1996, along with a projection to 1999. Also shown is an estimate of average-annual job openings that occur as workers leave the labor market. While there are significant differences in trends among the individual occupations, the overall totals show a sharp decline of 315,700 jobs in the county from the total of 3,057,900 in 1990 to 2,742,200 in 1994. A marginal gain of 61,000, or 2.2 percent, took place between 1994 and 1996. The 1999 projection anticipates an average gain of 67,800 jobs per year in these occupations between 1996 and 1999. (The Appendix shows the detailed occupational data for Table 19.)

While the occupations included in Table 19 represent only a small share of the overall list of occupations in Los Angeles County, the total of 2,803,200 jobs in those occupations accounted for 74 percent of total nonfarm wage and salary employment in the county in

1996. These occupations also tend to represent the types of occupations in which a significant share of the unemployed seek work.

In order to compare the occupational employment estimates by Census occupation to estimates of potential welfare-recipient job seekers, it was necessary to estimate the potential size of that welfare-recipient group. AFDC job-applicant counts were estimated separately for both the Family Group and Unemployed Parent programs, as shown in Table 20. In this table, the data for the number of AFDC Family Group and Unemployed Parent cases are from published annual DPSS data for 1997. The share of cases with no adults was derived from DPSS data for August 1997. The share of adults with no work experience was derived from the 1990 PUMS file and a UCB study. The model assumed only one adult per assistance unit, and that in all of the unemployed parent cases, the unemployed adult head of the family unit had work experience. (Los Angeles County has the option of exempting a certain limited share of the adults from the mandatory work requirements. The estimate of AFDC job applicants would be further reduced by the number exempted.)

Table 20
Calculation of The Number of Welfare Adults with Work Experience Expected to Compete in the Labor Market in Los Angeles County

Category	Family groups	Unemployed parent	Total
Average monthly AFDC cases, 1997	234,475	46,884	281,359
Share with no adult in assistance unit	31.7%	24.6%	
Number of adults	160,146	35,351	195,497
Share with no work experience	30%	0.0	
Number of adults with work experience	112,102	35,351	**147,453**

Table 19 shows that there would be 2.5 welfare-adult job seekers for every new net job opening expected to be created per year for this group of occupations in Los Angeles County between 1996 and 1999 (147,453 divided by 67,800).

It can be argued that most job openings are created through worker turnover, and that a *net* figure of new jobs undercounts actual job opportunities. However, true net job opportunities (on a yearly basis) can come from only two sources: new jobs and openings created when workers withdraw from the labor force. The figure in Table 19 that

represents total annual labor-force withdrawals (separations) for these occupations was 79,000. This figure raises the total net number of annual job opportunities to 146,800. However, workers are also entering the labor force at the same time that other workers are leaving. Between 1996 and 1997, the labor force in Los Angeles County expanded by 102,400 (on an annual basis), according to figures released by EDD.

The type of turnover often referred to in discussions on this subject is the case of a worker who leaves a job but who remains in the labor force. However, this can only occur if that worker either gets another job or becomes unemployed. That worker, in either case, is merely changing places with another worker, whether he or she be employed or unemployed. No *net* change has taken place in the number of jobs that exist, or in the number of workers who either occupy those jobs or remain among the unemployed. While it is true that many workers end up involuntarily sharing jobs because they experience periods of unemployment, these intermittent jobs are not generally a source of an income level that can adequately support a family.

The estimate of 67,800 new jobs per year that has been projected for Los Angeles County for this group of occupations were made three years ago, and newer projections recently released by EDD predict a somewhat faster rate of growth for Los Angeles County. Even so, the total of 83,700 new job created in the county during 1997 (on an annual-average basis) must be measured against the average unemployed figure of 307,500 for that year, and (as was pointed out in Chapter 6) the estimated 162,000 discouraged workers who would presumably enter the labor force if jobs became easier to obtain.

The ratio of the average number of unemployed to the estimate of net new job openings in Los Angeles during 1997 was 1 new job for every 3.7 unemployed workers. Adding the 147,000 estimated welfare-adult job seekers to the unemployment estimate for the county, and then taking that number as a ratio to the number of new jobs created in 1997 results in a ratio of 5.4 job seekers for every new job opening within these occupations. This ratio does not incorporate the considerable number of discouraged workers in the county. Also, approximately 20 percent of the persons working in these occupations were either poor or near-poor (see table in the Appendix).

Second Occupational Model: Jobs for Workers with Limited Work Experience

Another approach to measuring the number of job opportunities for welfare adults examines the occupational structure of Los Angeles County and evaluates the amount of training time necessary for a worker to be able to perform a group of job tasks adequately. This analysis requires converting the EDD occupational employment data (coded in OES occupational categories) into an occupational coding system that contains

training-time estimates. (See the Appendix for a more detailed discussion of the process used to allocate employment by training-time category, and for the detailed occupational information contained in group of occupations discussed below.)

Concerning the educational attainment level of welfare adults, two sources, the 1990 PUMS file and unpublished data from a University of California, Berkeley study of AFDC adults, show that roughly 80 percent of this group has, at most, a high-school education or less, and that about 55 percent of the group had not completed high school. About 35 to 40 percent of welfare adults had either never worked or had not worked in over 10 years, and about one-fourth spoke English either poorly or not at all. About 80 percent of this group was female.

While the educational requirements of various jobs could have been used to select appropriate occupations, given the relatively limited work experience of many welfare adults, it was determined that an occupational training-time requirement (classroom or on-the-job) of one year or less would incorporate most of the potential welfare job applicants. In addition, given the preponderance of women in this group, occupations were not considered if they required frequent heavy lifting.

Table 21

Jobs Appropriate for Most Welfare Adults

Employment Trends* for OES Occupations Considered Appropriate For Welfare Recipients, Showing EDD Job Applicants, and Projected Job Openings from Growth and Replacement

Los Angeles County 1990, 1994, 1996, 1999

Description	Employment Or Job Applicants
Annual average employment, 1990…….	1,303,400
Annual average employment, 1994…….	1,181,000
Employment change 1990-1994……..	*122,400*
Annual average employment, 1996…….	1,222,900
Employment change 1994-1996……..	*41,900*
Projected employment 1999……..	1,288,800
Projected employment change 1996-1999.	*65,900*
Average annual new jobs 1996-1999……..	21,600
Annual openings for replacement…….	37,200
Total annual openings……..	*58,800*
EDD job applicants, FY 1996-1997……..	*108,300*
Applicants eligible for Unemployment Ins…	67,600

*All data produced by the Employment Development Department

Once the OES employment data were redistributed within a system coded for job requirements, the job-characteristic limitations described above were applied to eliminate occupations not appropriate for most adults now receiving welfare benefits. A summary of data for these occupations is shown in Table 21. The total estimated employment in these selected jobs was 1,222,900, or one-third of all nonfarm wage-and-salary employment in Los Angeles County in 1996. Annual job openings were estimated by calculating the average-annual change for the 1996-99 employment projection for each occupation. This would imply an annual average of about 22,000 new jobs, and over 37,000 job openings from worker-replacement requirements (separations). However, the average number of job applicants at EDD placement offices during the 1996-97 fiscal year in these occupations was over 108,000, of whom 67,500 were considered eligible for unemployment insurance. Just considering EDD-registered applicants would imply a minimum unemployment rate of about eight 8 percent within this group of occupations for FY 1996-97, and over two-thirds of these applicants could qualify for unemployment benefits.

An analysis of the median wage offered for these occupations is shown in Table 22. (The median wage rate for each occupation was actually an average of the median wage rates for various occupations--within each OES category--for which employers filed job orders with EDD during the 1996-97 fiscal year.) To create these distributions of jobs by wage rate, each wage rate was weighted by both the number of people working and the number of job openings in each occupation. The table shows that the median wage offered for the occupations comprising over three-fourths of projected job openings in this group of occupations paid $6.99 per hour or less. Nineteen percent of the projected openings were estimated to pay $7.00 to $9.99, and 1.3 percent paid $10 and over $10.00 per hour.

Table 22
Distribution of Jobs by Hourly Wage Offered
Jobs for Adult Welfare Recipients by Median Wage Group
(Based on EDD Job Openings Received)
Showing Estimated Employment and Openings
Los Angeles County, 1996

Wage Group	Total Employment 1996	Pct. All Emp.	Total Annual Openings	Pct. All Open.
	1,222,894	100.0	60,495	100.0
$10.00 and over	34,011	2.8	785	1.3
$7.00 to $9.99	287,219	23.5	11,485	19.0
$4.25 to $6.99	872,702	71.4	46,990	77.7
No wage reported	28,963	2.4	1,236	2.0

Table 21 shows the effect of the 1990-94 recession on employment levels in these occupations. Of the 1,303,400 jobs that existed in 1990, about 122,000, or 9.4 percent, had disappeared by 1994. While 42,000 of these jobs had been recovered by 1996, it will probably not be until near the end of the decade before overall employment in this group of occupations returns to the 1990 level. Table 21 also shows that an average of 22,000 new jobs in these occupations are expected annually through 1999. Although these new jobs will represent about one-third of all annual new jobs projected for the county, the 147,500 welfare adults who are required to find work must compete with the 108,000 EDD job applicants, plus other unemployed workers, for these jobs. Moreover, for most of these positions, even a full-time job would not keep a family of three out of poverty, and would be unlikely to allow sufficient access to medical and child care. A report recently released by Los Angeles County showed that 32 percent of the county's entire population had no medical insurance, and 60 percent of these were considered medically indigent (also poor or near poor). Of this uninsured group, 88 percent was comprised of working adults and their dependents, and a large share lived in the same communities that also have a significant population of welfare recipients.[1]

Worker training and additional education could help welfare adults find higher-paying and secure employment that offered medical insurance. However, the same could be said for the hundreds of thousands workers already in the low-wage labor force who subsist slightly above or in poverty, whose children often do not live in a healthy and secure environment, and who are themselves potential candidates for public assistance. The education and training of welfare adults is, in most instances, a necessary condition for their financial independence. But there must also be enough jobs available that can absorb and support the families of not only welfare adults, but of all other adult workers who are striving to support their families, and who also wish to rise above a marginal existence.

Summary of Findings

- Employment data for occupations in which welfare recipients have experience show that between 1990 and 1994, there was a decline of 315,700 jobs in the county. A gain of only 61,000, or 2.2 percent, took place between 1994 and 1996. Projections anticipate an average gain of 67,800 jobs per year in these occupations between 1996 and 1999.

- Over the next two years there will be an average of 2.5 welfare-adult job seekers for every new net job opening expected to be created per year in Los Angeles County for occupations in which welfare recipients have experience. This estimate does not include other unemployed job seekers in the county.

- Adding the estimate of potential welfare-adult job seekers to the total number of unemployed workers in county results in a ratio of 5.4 job seekers for every new job opening within occupations in which welfare recipients have had experience. This ratio does not incorporate the considerable number of discouraged workers in the county.

- In occupations appropriate for most welfare adults, in three-fourths of the projected annual job openings the median wage offered for new job applicants was $6.99 per hour or less. Nineteen percent of these projected openings were estimated to pay $7.00 to $9.99, and 1.3 percent paid $10 and over $10.00 per hour.

- A separate analysis showed that within occupations considered appropriate for welfare adults, of the 1,303,400 jobs that existed in 1990, about 122,000, or 9.4 percent, had disappeared by 1994. While 42,000 of these jobs had been recovered by 1996, it will probably not be until near the end of the decade before overall employment in this group of occupations returns to the 1990 level.

Notes

[1] Michael R. Cousineau and Alicia Kokkinis, ***L.A. Health***: *Over 2.7 Million Uninsured in Los Angeles County, Including 2 Million Adults*, Los Angeles County Department of Health Services, Volume 1, Issue 1, May 1998.

Chapter 10
Policy Recommendations

Employment of welfare recipients depends upon, and in turn will influence, the future growth path of the Los Angeles economy. The industrial structure and vitality of the region will determine the level of demand and type of work available for aid recipients. And in turn, the quality and availability of workers will influence the growth of industries in the region and the type of new job opportunities that are created. Employment of aid recipients and growth of the economy to provide adequate job opportunities can be seen as linked developmental challenges for the Los Angeles region.

These challenges can be addressed through an active strategy of targeting economic development efforts on industries that can absorb welfare workers and offer them career advancement, linked with concurrent education, job training, child care and transportation services for aid recipients moving into the labor market. Or it can follow a passive strategy of allowing proliferation of minimum-wage, minimum-skill industries, and leave aid recipients to their own devices in competing for an inadequate number of part-time, low-paid jobs. We believe it is in the fundamental interests of the Los Angeles region to pursue an active strategy that provides real opportunities for aid recipients to achieve a higher standard of living and to become stronger contributors to the region's consumer economy and public sector tax base.

The goal of enabling all potential workers to put their skills to productive use in building a viable economy can be a unifying vision that informs and gives common purpose to public sector policy makers, welfare administrators, education, job training and supportive service organizations, and economic development professionals. Coordinated investments in worker skills, employment services, economic development, and job creation can yield high dividends through reduced social dependence and a stronger regional economy.

In this chapter we offer strategy recommendations for:

1. Identifying different work-readiness groups among aid recipients, and providing appropriate employment-related services to each group

2. Economic development and job creation

3. Review of long-term strategies for welfare financing

Identifying and Assisting Different Work-Readiness Groups

Successful employment and financial self-sufficiency are dependent upon having a number of skills and resources. Some factors such as social skills and motivation are difficult to quantify, but a number of important factors can be identified and should be considered in determining the work-readiness of aid recipients and in planning appropriate services.[1] Nine assessment factors are listed below in Figure 46.

Figure 46
Work-Readiness Assessment Criteria

	Viable Employment Prospects	Intermediate Employment Prospects	Difficult Employment Prospects
Education			
Some college	■		
High school diploma		■	
No high school diploma			■
Ability to speak English			
Very well or well	■		
Not well or not at all			■
Age of children			
All six or older	■		
One or more under six			■
Work history			
Worked before	■	■	
Never worked			■
Length of time since last job			
Worked in current year	■		
Worked in previous two years		■	
Three or more years since last job			■
Occupation *(ratings from Figure 45)*			
Three or four positive factors	■		
Two positive factors		■	
One or no positive factors			■
Access to vehicle to get to work			
Yes	■		
No		■	■
Other helping adults in the household			
Yes	■		
No		■	■
Length of time on welfare			
Twelve months or less	■		
Thirteen to thirty-six months		■	
Thirty-seven months or longer			■

The analysis of work-readiness groups in Chapter 5 suggested that about 20 percent of single mothers in the county's TANF caseload (the new welfare program for poor children and their parents) are in the group with viable employment prospects, another 20 percent in the group with intermediate prospects, and 60 percent in the group with difficult prospects. It should be noted that these estimates of the relative size of each work-readiness group describe the overall caseload. The flow of new applicants into the welfare system is likely to include a significantly higher share of people with viable employment prospects.

We recommend that these, or similar, assessment factors be used to individually assess the work-readiness of aid recipients subject to the time limits on benefits set by TANF and CalWorks. The assessment criteria can be used to determine the work-readiness classification into which the preponderance of rating factors for an individual fall. Individual assessment of participants' work readiness is likely to result in modifying past practices under the county's GAIN program, with less emphasis on immediate full time employment for most recipients, and more emphasis on a balanced mix of part-time work, schooling and job training.[2]

Individuals who are ready to search for a job should be counseled to avoid occupations with bleak prospects for financial survival. Based on labor-market outcomes shown for different educational, occupational, and employment groups in this report, the menu of services and activities listed in Figure 47 is recommended for each work-readiness group.

Figure 47
Services and Activities for Each Work-Readiness Group

WORK-RELATED ACTIVITIES AND SERVICES	*WORK-READINESS GROUPS*		
	Viable Employment Prospects	**Intermediate Employment Prospects**	**Difficult Employment Prospects**
Job search and placement	■	■	
Full-time employment	■		
Part-time employment		■	■
Subsidized employment			■
Work tools and clothes	■	■	■
Education		■	■
English language training		■	■
Job skills training		■	■
Childcare	■	■	■
Transportation assistance	■	■	■

Economic Development and Job Creation

Growth in the number of jobs and correspondingly skilled workers is interactive, with jobs attracting workers, and appropriately skilled and experienced workers in turn making business expansion feasible. The supply of jobs in Los Angeles' labor market must expand to provide sufficient employment opportunities for currently unemployed workers as well as new entrants from the welfare rolls. This calls for innovative approaches to planning and coordination of economic development and job training programs.

Economic development and job creation should be targeted within industries that will both hire welfare workers and provide opportunities to earn family-supporting incomes. Economic development projects should be based on analysis of the skill characteristics of available workers as well as the strengths of specific localities for business attraction and expansion.

Training of workers must be responsive to the skill requirements of employers as well as their timing for hiring new workers. Workers' skills are not suitable for warehousing; if jobs are not available in the occupations for which workers are trained, their skills are likely to atrophy, and the money and effort that went into training will have been wasted. A high level of coordination is required to mesh the schedules of job training programs with local business construction and expansion projects.

Economic development and job creation strategies that are needed to employ Los Angeles County's welfare workforce include:[3]

- Retain and expand businesses in urban centers by facilitating capital access and partnerships with the corporate and university sectors.
- Develop nonprofit business enterprises through technical assistance and capital for expansion.
- Fund the California Infrastructure Bank.
- Target investment of public sector retirement fund assets for local economic development.
- Establish a secondary market for state and local economic development revolving loan funds, similar to Fannie Mae, to increase the amount of capital available to small businesses.
- Streamline and maximize business incentives for local economic development and package them into customized, flexible "bundles" for targeted industries.
- Use private or nonprofit agencies as temporary employment agencies to place and support welfare workers.
- Provide subsidized work to build work experience and job skills for recipients without work histories.
- Provide improved local labor market and industrial base information.

Long-term Strategies for Welfare Financing

There is broad consensus that it is better for aid recipients to work than to be on welfare. Among those who have ongoing contact with welfare issues there is also a widely shared assessment that the share of the county's caseload that is unable to become financially self-sufficient within the five-year lifetime limit on aid will be substantially larger than the 20 percent the county is permitted to allow grant waivers to under TANF regulations. This will include individuals with genuine barriers to employment, including significant skill and social development deficits, as well as problematic family circumstances.

At both the county and state levels an analysis should be made of the feasibility of severing portions of local and state funds for welfare from federal TANF funds to create a longer-term income maintenance program for individuals who are unlikely to achieve economic self-sufficiency within the time limits set by TANF.[4]

Conclusion

It is beneficial for people who are able to work to have employment. Work offers dignity, standing in society, human relationships individuals otherwise would not have, and possibilities for an improved standard of living. At the same time, the Los Angeles region does not have enough jobs for everyone who needs work, and significant gains in both the carrying capacity of the local economy and the skill levels of aid recipients are needed to provide adequate opportunities for economic self-sufficiency. The need for a stronger economy and an expanding labor force of skilled, productive workers can provide a unifying vision for growth of the Los Angeles region.

Notes

[1] We are indebted to Rosina Becerra for her observations about factors associated with successfully transitioning from welfare to work.

[2] CalWORKS establishes a set of requirements for the percent of the caseload that must be involved in work activities and the minimum number of hours per week for involvement in those activities. The requirements increase yearly. By 2002, 50 percent of single parent families must be involved in at least 32 hours per week of work-related activities, and by 1999, 90 percent of two-parent families must be involved in at least 35 hours per week of work-related activities.

Work-related activities include:

- employment, subsidized or unsubsidized, in the private or public sector
- on-the-job training
- job search and job readiness assistance for up to 6 weeks
- community service

- vocational training
- job skills training that is directly related to employment
- education that is directly related to employment
- providing child care services for an individual who is participating an a community service program

Under this definition of work-readiness activities a mix of part-time employment and schooling or job training is permissible.

[3] These economic development recommendations are partially adapted from a report by the California Association for Local Economic Development, ***Welfare to Work: A Framework for Success***, July 1997.

[4] This suggestion has been made by Thomas MaCurdy and Margaret O'Brien-Strain, ***Who Will Be Affected by Welfare Reform in California***, Public Policy Institute of California, February 1997.

APPENDIX

List of Tables in Appendix

Table

Appendix

Chapter 4

Tables containing detailed 1990 PUMS data for the comparison of income data for 1989 for single mothers receiving welfare aid and those not receiving aid are presented here. Income data are compared for single mothers, their entire households, and for other adults in their households. Table 23 presents detailed data for Table 5 of Chapter 4, Table 24 for Table 6, and Table 25 for Table 7 of that chapter.

Table 23
Average Distribution of Total Income Received in 1989, by Type for Female Parents, Not Married, with Children under 18 Present Receiving and Not Receiving Public Assistance
1990 Census Data from Los Angeles County PUMS File

RECEIVING PUBLIC ASSISTANCE

Income group	All adults in HH	Percent of total	Avg. HH income in 1989	Avg. % wages & sal.	Avg. % self-emp. nonfrm	Avg. % self-emp. farm	Avg. % int, div. rents	Avg. % Social security	Avg. % Public assist.	Avg. % retire-ment	Avg. % all other
Total	54,851	100.0	9,128	14.3	0.6	0.0	0.3	0.8	83.7	0.3	2.4
$1 to $4,999	10,593	19.3	2,252	8.8	0.5	0.0	0.1	1.0	89.4	0.1	7.5
$5,000 to $9,999	29,396	53.6	7,709	6.9	0.2	0.0	0.0	0.5	92.2	0.2	1.1
$10,000 to $14,999	4,201	7.7	12,152	50.2	1.5	0.0	0.5	1.9	44.8	1.1	2.6
$15,000 to $19,999	7,490	13.7	15,754	15.6	0.8	0.0	0.5	0.8	81.9	0.4	0.7
$20,000 to $29,999	1,807	3.3	24,353	64.7	1.3	0.0	1.9	2.9	29.1	0.2	2.6
$30,000 to $49,999	1,184	2.2	36,800	70.0	4.7	0.0	1.8	0.8	20.4	2.3	0.6
$50,000 and over	180	0.3	59,740	47.3	12.8	0.0	15.8	6.2	17.9	0.0	1.0

NOT RECEIVING PUBLIC ASSISTANCE

Income group	All adults	Percent of total	Avg. HH income in 1989	Avg. % wages & sal.	Avg. % self-emp. nonfrm	Avg. % self-emp. farm	Avg. % int, div. rents	Avg. % Social	Avg. % retire-	Avg. % all

group	in HH	total	in 1989	& sal.	nonfrm	farm	rents	security	ment	other
Total	164,862	100.0	18,352	85.1	3.7	0.0	1.5	1.7	1.1	6.8
None	19,719	12.0	0	0.0	0.0	8.7	0.0	0.0	0.0	0.0
$1 to $4,999	14,250	8.6	2,359	74.6	5.9	0.0	1.2	3.3	2.2	12.7
$5,000 to $9,999	24,370	14.8	7,411	75.6	3.3	0.0	1.1	3.8	2.6	13.5
$10,000 to $14,999	24,267	14.7	12,028	89.1	3.1	0.0	0.5	2.0	0.9	4.3
$15,000 to $19,999	19,249	11.7	17,002	91.5	3.0	0.0	1.0	1.1	0.5	3.0
$20,000 to $29,999	31,359	19.0	24,081	91.0	2.0	0.0	1.0	0.7	0.4	4.9
$30,000 to $49,999	25,247	15.3	36,800	88.1	3.4	0.0	2.3	0.5	0.6	5.1
$50,000 and over	6,401	3.9	76,905	74.4	11.0	0.5	7.5	0.6	0.8	5.1

Chapter 4 (continued)

Table 24
Average Distribution of Household Income Earned in 1989, by Type, for All Adults in Households of Female Parents, Not Married, with Children under 18 Present From 1990 Census Data from Los Angeles County PUMS File

RECEIVING PUBLIC ASSISTANCE

Income group	All adults in HH	Percent of total	Avg. HH income in 1989	Avg. % wages & sal.	Avg. % self-emp. nonfrm	Avg. % self-emp. farm	Avg. % int, div. rents	Avg. % Social security	Avg. % Public assist.	Avg. % retire-ment	Avg. % all other
Total	96,202	100.0	17,030	28.1	1.1	0.0	0.6	2.4	66.9	0.9	2.8
$1 to $4,999	7,623	7.9	2,111	9.9	0.4	0.0	0.6	1.5	87.5	0.2	12.2
$5,000 to $9,999	24,539	25.5	7,825	7.5	0.1	0.0	0.0	0.9	91.2	0.2	1.7
$10,000 to $14,999	9,484	9.9	12,499	41.8	1.7	0.0	0.4	4.8	50.3	1.1	2.1
$15,000 to $19,999	14,279	14.8	16,410	24.8	1.3	0.0	0.4	2.6	69.7	1.3	1.4
$20,000 to $29,999	13,605	14.1	24,672	55.2	1.6	0.0	1.2	5.8	34.1	2.0	1.4
$30,000 to $49,999	15,806	16.4	38,631	69.2	2.2	0.0	1.8	3.6	20.8	2.4	1.2
$50,000 and over	10,866	11.3	71,894	77.8	5.3	0.0	2.8	1.6	11.1	1.4	1.0

NOT RECEIVING PUBLIC ASSISTANCE

	All	Percent	Avg. HH	Avg. %	Avg. % self-	Avg. % self-	Avg. %	Avg. %	Avg. %	Avg. %

Income group	adults in HH	of total	income in 1989	wages & sal.	emp. nonfrm	emp. farm	int, div. rents	Social security	retire- ment	all other
Total	378,178	100.0	32,625	84.6	4.0	0.0	1.7	2.8	1.7	5.1
None	11,037	2.9	-8	0.0	69.8	17.4	12.8	0.0	0.0	0.0
$1 to $4,999	11,760	3.1	2,407	67.9	5.8	0.0	1.5	6.9	3.5	14.3
$5,000 to $9,999	22,518	6.0	7,587	69.7	3.6	0.1	1.5	6.5	3.9	14.7
$10,000 to $14,999	29,659	7.8	12,255	83.3	4.5	0.1	0.9	3.8	1.8	5.6
$15,000 to $19,999	33,156	8.8	17,248	87.4	3.5	-0.1	1.0	2.9	1.5	3.8
$20,000 to $29,999	65,042	17.2	24,464	88.7	2.9	0.0	0.8	2.1	1.0	4.5
$30,000 to $49,999	96,936	25.6	38,032	88.0	3.1	-0.0	1.8	1.8	1.5	3.8
$50,000 and over	108,070	28.6	76,715	84.9	5.9	0.2	3.4	1.8	1.7	2.2

Chapter 4 (continued)

Table 25
Average Distribution of Income Earned in 1989, by Type,
for Other Adults in The Households of Single Female Parents
1990 Census Data from Los Angeles County PUMS File

RECEIVING PUBLIC ASSISTANCE

Income group	All adults in HH	Percent of total	Avg. HH income in 1989	Avg. % wages & sal.	Avg. % self-emp. nonfrm	Avg. % self-emp. farm	Avg. % int, div. rents	Avg. % Social security	Avg. % Public assis.	Avg. % retire-ment	Avg. % all other
Total	44,111	100.0	18,423	69.9	2.5	0.0	1.4	7.1	12.7	2.8	3.5
None	4,230	9.6	0	.	.	.	.	.	.	.	.
$1 to $4,999	3,879	8.8	2,242	65.1	0.9	0.0	2.2	5.0	16.4	0.4	10.0
$5,000 to $9,999	5,774	13.1	7,262	47.6	2.5	0.0	0.2	10.3	28.5	5.9	5.1
$10,000 to $14,999	4,567	10.4	12,233	67.5	3.3	0.0	0.9	11.6	10.8	3.0	2.9
$15,000 to $19,999	4,380	9.9	16,988	75.6	1.5	0.0	0.6	9.5	9.3	1.8	1.7
$20,000 to $29,999	7,547	17.1	24,563	81.9	1.3	0.0	1.5	5.3	7.0	2.0	1.0
$30,000 to $49,999	8,317	18.9	38,482	82.5	2.8	0.0	2.7	4.3	3.7	3.4	0.6
$50,000 and over	5,417	12.3	74,200	84.4	6.8	0.0	2.7	1.3	2.0	1.2	1.7

NOT RECEIVING PUBLIC ASSISTANCE

Income group	All adults in HH	Percent of total	Avg. HH income in 1989	Avg. % wages & sal.	Avg. % self-emp. nonfrm	Avg. % self-emp. farm	Avg. % int, div. rents	Avg. % Social security	Avg. % retire-ment	Avg. % all other
Total	213,316	100.0	25,266	83.3	4.3	0.0	1.7	6.1	3.0	1.7
None	17,045	8.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
$1 to $4,999	15,929	7.5	2,484	77.7	5.2	0.0	1.5	9.4	3.1	3.0
$5,000 to $9,999	16,309	7.6	7,368	74.5	2.5	0.0	0.9	16.2	2.8	3.2
$10,000 to $14,999	19,276	9.0	12,048	80.7	4.0	0.2	1.5	7.4	3.9	2.3
$15,000 to $19,999	17,375	8.1	17,065	85.0	3.9	0.0	1.3	4.3	4.2	1.3
$20,000 to $29,999	33,785	15.8	24,152	86.3	3.5	-0.0	1.4	4.4	3.3	1.1
$30,000 to $49,999	46,078	21.6	38,487	88.4	3.7	-0.0	1.6	2.8	2.2	1.2
$50,000 and over	47,519	22.3	76,917	86.0	6.4	0.2	3.0	1.6	2.2	0.6

Chapter 7

The following tables present detailed labor force data used to estimate discouraged workers in Los Angeles County. Table 26 shows the data and calculations used to estimate a revised Los Angeles unemployment rate for the years 1990 through 1997. Table 27 presents the same for the estimate of discouraged workers using 1989 participation rates by race and gender applied to those cohorts for 1997.

Model 1

This method used the labor force participation rates for California (excluding Los Angeles County) to calculate discouraged workers since 1990 in Los Angeles County. (See the discussion in this chapter in the main body of the report.) Table 26 gives detailed data used for Table 9 in Chapter 7.

Table 26
Civilian Labor Force Data, Including Working-age Population, Participation Rate, Employment, and Unemployment (Data in Thousands)

California (Other than Los Angeles County) 1990-1997

Year	Pop. 16+	LF part. rate	Civ labor force	Employ-ment	Unem-ploy-ment	Unemp. rate
90	15,873	67.1	10,647	10,056	591	5.5
91	16,082	66.1	10,627	9,845	782	7.4
92	16,317	66.5	10,855	9,890	965	8.9
93	16,475	66.2	10,914	9,927	987	9.0
94	16,593	66.7	11,075	10,157	918	8.3
95	16,801	65.8	11,056	10,194	863	7.8
96	16,880	66.2	11,174	10,411	763	6.8
97	17,127	67.0	11,475	10,776	699	6.1

Los Angeles County, 1990-1997

Year	Pop. 16+	CLF part. rate	Civ. labor force	Employ-ment	Unem-ploy-ment	Unemp. rate
90	6,762	66.4	4,489	4,231	259	5.8
91	6,775	66.3	4,491	4,132	359	8.0
92	6,832	65.6	4,479	4,049	431	9.6
93	6,867	63.8	4,381	3,957	423	9.7
94	6,871	64.0	4,396	3,985	412	9.4
95	6,784	64.2	4,354	4,010	344	7.9
96	6,782	64.8	4,394	4,033	361	8.2
97	6,998	64.3	4,497	4,189	307	6.8

Chapter 7 (continued)

Table 26 (continued)
Los Angeles County:
Using Remainder-of-California Participation Rate for 1990-1997

Year	Pop. 16+	Rem.Cal. part. rate	Civ. labor force	Employ- ment	Unem- ploy- ment	Unemp. rate
90	6,762	67.1	4,536	4,231	305	6.7
91	6,775	66.1	4,477	4,132	345	7.7
92	6,832	66.5	4,545	4,049	496	10.9
93	6,867	66.2	4,549	3,957	592	13.0
94	6,871	66.7	4,586	3,985	602	13.1
95	6,784	65.8	4,464	4,010	455	10.2
96	6,782	66.2	4,490	4,033	456	10.2
97	6,998	67.0	4,688	4,189	499	10.6

Chapter 7 (continued)

Model 2

This method applied Los Angeles County participation rates from 1989 labor force data by race and gender to the same race and gender categories for 1997 to calculate 1997 discouraged workers.

Table 27
Calculation of Annual Average Civilian Labor Force Data for 1997
Using Both the 1989 and 1997 Labor Force Participation Rates
Los Angeles County

Race-Gender category	1997 part. rate	1997 Pop. 16+	1997 CLF	1997 employment	1997 unemployment	1997 unemp. rate
Total labor force	65.3	6,887,935	4,496,676	4,189,181	307,495	6.8
Total male	75.8	3,411,485	2,586,839	2,421,378	165,461	6.4
Total female	54.9	3,476,449	1,909,837	1,767,803	142,034	7.4
White male	77.8	2,669,126	2,075,987	1,948,914	127,073	6.1
White female	54.5	2,671,685	1,455,681	1,346,522	109,159	7.5
Black male	68.6	291,353	199,911	176,190	23,722	11.9
Black female	55.3	335,942	185,934	167,823	18,111	9.7
All other male	69.0	451,006	311,236	296,570	14,666	4.7
All other female	57.1	468,822	267,926	253,162	14,765	5.5

Race-Gender category	1989 part. rate	97 CLF using 89 PR	Add. 97 CLF using 89 PR	Unemp. plus add. CLF	1997 unemp. rate	New 97 unemp. rate

	Total labor force	**67.6**	**4,659,202**	**162,526**	**470,021**	**6.8**
10.1						
	Total male	**79.1**	**2,698,485**	**111,646**	**277,107**	**6.4**
10.3						
	Total female	**56.4**	**1,960,717**	**50,880**	**192,915**	**7.4**
9.8						
	White male	**80.2**	**2,140,639**	**64,652**	**191,725**	**6.1**
9.0						
	White female	**55.6**	**1,485,457**	**29,776**	**138,935**	**7.5**
9.4						
	Black male	**72.5**	**211,231**	**11,319**	**35,041**	**11.9**
16.6						
	Black female	**62.2**	**208,956**	**23,021**	**41,133**	**9.7**
19.7						
	All other male	**77.4**	**349,079**	**37,843**	**52,509**	**4.7**
15.0						
	All other female	**55.7**	**261,134**	**-6,793**	**7,972**	**5.5**
3.1						

Chapter 8

Table 28
OCCUPATIONS OF WELFARE WORKERS IN LOS ANGELES COUNTY
PUMS Records with Public Assistance Income and Work History between the Ages of 16 and 64

Census Code	Title of Occupation	Number Individuals	% of Individuals
	TOTAL NUMBER WITH WORK HISTORY	**181,234**	
	TOTAL NUMBER WITH OCCUPATION	**107,616**	**100.0%**
000-202	**MANAGERIAL AND PROFESSIONAL SPECIALTY OCCUPATIONS**	**12,772**	**11.9%**
000-042	**Executive, Administrative, and Managerial Occupations**	**5,712**	**5.3%**
5	Administrators and officials, public administration (1132-1139)	94	0.1%
6	Administrators, protective services (1131)	20	0.0%
7	Financial managers (122)	106	0.1%
8	Personnel and labor relations managers (123)	21	0.0%
009-012	Purchasing managers (124)	63	0.1%
13	Managers, marketing, advertising, and public relations (125)	216	0.2%
14	Administrators, education and related fields (128)	176	0.2%
15	Managers, medicine and health (131)	108	0.1%
17	Managers, food serving and lodging establishments (1351)	834	0.8%
18	Managers, properties and real estate (1353)	433	0.4%
21	Managers, service organizations, n.e.c. (127, 1352, 1354, part 1359)	330	0.3%
22	Managers and administrators, n.e.c. (121, 126, 132-1343, 136-139)	1,605	1.5%
023-042	*Management Related Occupations*	*1,706*	*1.6%*
23	Accountants and auditors (1412)	539	0.5%
24	Underwriters (1414)	21	0.0%
25	Other financial officers (1415, 1419)	217	0.2%
27	Personnel, training, and labor relations specialists (143)	332	0.3%
33	Purchasing agents and buyers, n.e.c. (1449)	89	0.1%
34	Business and promotion agents (145)	42	0.0%
35	Construction inspectors (1472)	19	0.0%
36	Inspectors and compliance officers, except construction (1473)	88	0.1%
037-042	Management related occupations, n.e.c. (149)	359	0.3%
043-202	**Professional Specialty Occupations**	**7,060**	**6.6%**
043-063	**Engineers, Architects, and Surveyors**	**436**	**0.4%**
43	Architects (161)	19	0.0%
044-062	*Engineers*	*417*	*0.4%*
44	Aerospace (1622)	65	0.1%
47	Petroleum (1625)	37	0.0%
53	Civil (1628)	43	0.0%

Chapter 8 (continued)

Table 28 (continued)

55	Electrical and electronic (1633, 1636)	137	0.1%
57	Mechanical (1635)	16	0.0%
059-062	Engineers, n.e.c. (1639)	119	0.1%
064-068	*Mathematical and Computer Scientists*	*219*	*0.2%*
64	Computer systems analysts and scientists (171)	108	0.1%
65	Operations and systems researchers and analysts (172)	82	0.1%
68	Mathematical scientists, n.e.c. (1739)	29	0.0%
069-083	*Natural Scientists*	*102*	*0.1%*
73	Chemists, except biochemists (1845)	72	0.1%
77	Agricultural and food scientists (1853)	6	0.0%
78	Biological and life scientists (1854)	24	0.0%
084-094	*Health Diagnosing Occupations*	*128*	*0.1%*
84	Physicians (261)	76	0.1%
87	Optometrists (281)	26	0.0%
089-094	Health diagnosing practitioners, n.e.c. (289)	26	0.0%
095-112	**Health Assessment and Treating Occupations**	**925**	**0.9%**
95	Registered nurses (29)	807	0.7%
96	Pharmacists (301)	40	0.0%
098-105	*Therapists*	*78*	*0.1%*
98	Respiratory therapists (3031)	24	0.0%
103	Physical therapists (3033)	44	0.0%
106-112	Physicians' assistants (304)	10	0.0%
113-154	*Teachers, Postsecondary*	*124*	*0.1%*
127	Engineering teachers (2226)	21	0.0%
154	Postsecondary teachers, subject not specified	103	0.1%
155-162	*Teachers, Except Postsecondary*	*1,856*	*1.7%*
155	Teachers, prekindergarten and kindergarten (231)	389	0.4%
156	Teachers, elementary school (232)	952	0.9%
157	Teachers, secondary school (233)	39	0.0%
158	Teachers, special education (235)	48	0.0%
159-162	Teachers, n.e.c. (236, 239)	428	0.4%
163	Counselors, Educational and Vocational (24)	211	0.2%
164-165	*Librarians, Archivists, and Curators*	*105*	*0.1%*
164	Librarians (251)	105	0.1%
166-173	*Social Scientists and Urban Planners*	*54*	*0.1%*
166	Economists (1912)	33	0.0%
167	Psychologists (1915)	21	0.0%
174-177	*Social, Recreation, and Religious Workers*	*795*	*0.7%*
174	Social workers (2032)	519	0.5%
175	Recreation workers (2033)	178	0.2%
177	Religious workers, n.e.c. (2049)	98	0.1%

Chapter 8 (continued)

Table 28 (continued)

178-182	*Lawyers and Judges*	*74*	*0.1%*
178	Lawyers (211)	74	0.1%
183-202	*Writers, Artists, Entertainers, and Athletes*	*2,031*	*1.9%*
183	Authors (321)	145	0.1%
184	Technical writers (398)	37	0.0%
185	Designers (322)	369	0.3%
186	Musicians and composers (323)	280	0.3%
187	Actors and directors (324)	413	0.4%
188	Painters, sculptors, craft-artists, and artist printmakers (325)	212	0.2%
189-192	Photographers (326)	113	0.1%
194	Artists, performers, and related workers, n.e.c. (328, 329)	173	0.2%
195-196	Editors and reporters (331)	86	0.1%
197	Public relations specialists (332)	93	0.1%
198	Announcers (333)	66	0.1%
199-202	Athletes (34)	44	0.0%
203-402	**TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT OCCUPATIONS**	**36,515**	**33.9%**
203-242	**Technicians and Related Support Occupations**	**2,391**	**2.2%**
203-212	*Health Technologists and Technicians*	*1,276*	*1.2%*
203	Clinical laboratory technologists and technicians (362)	98	0.1%
204	Dental hygienists (363)	21	0.0%
205	Health record technologists and technicians (364)	70	0.1%
206	Radiologic technicians (365)	115	0.1%
207	Licensed practical nurses (366)	528	0.5%
208-212	Health technologists and technicians, n.e.c. (369)	444	0.4%
213-242	**Technologists and Technicians, Except Health**	**603**	**0.6%**
213-222	*Engineering and Related Technologists and Technicians*	*439*	*0.4%*
213	Electrical and electronic technicians (3711)	189	0.2%
215	Mechanical engineering technicians (3713)	13	0.0%
216	Engineering technicians, n.e.c. (3719)	70	0.1%
217	Drafting occupations (372)	128	0.1%
218-222	Surveying and mapping technicians (373)	39	0.0%
223-225	*Science Technicians*	*73*	*0.1%*
223	Biological technicians (382)	10	0.0%
224	Chemical technicians (3831)	37	0.0%
225	Science technicians, n.e.c. (3832, 3833, 384, 3	26	0.0%
226-242	*Technicians, Except Health, Engineering, and Science*	*603*	*0.6%*
226	Airplane pilots and navigators (825)	33	0.0%
227	Air traffic controllers (392)	29	0.0%
228	Broadcast equipment operators (393)	26	0.0%

Chapter 8 (continued)

Table 28 (continued)

229-232	Computer programmers (3971, 3972)	140	0.1%
234	Legal assistants (396)	199	0.2%
235-242	Technicians, n.e.c. (399)	176	0.2%
243-302	**Sales Occupations**	**13,393**	**12.4%**
243-252	Supervisors and Proprietors, Sales Occupations (40)	1,327	1.2%
253-257	*Sales Representatives, Finance and Business Services*	*1,098*	*1.0%*
253	Insurance sales occupations (4122)	401	0.4%
254	Real estate sales occupations (4123)	336	0.3%
255	Securities and financial services sales occupations (4124)	44	0.0%
256	Advertising and related sales occupations (4153)	91	0.1%
257	Sales occupations, other business services (4152)	226	0.2%
258-262	*Sales Representatives, Commodities, Except Retail*	*740*	*0.7%*
258	Sales engineers (421)	24	0.0%
259-262	Sales representatives, mining, manufacturing, and wholesale (423, 424)	716	0.7%
263-282	*Sales Workers, Retail and Personal Services*	*10,093*	*9.4%*
263	Sales workers, motor vehicles and boats (4342, 4344)	181	0.2%
264	Sales workers, apparel (4346)	631	0.6%
265	Sales workers, shoes (4351)	93	0.1%
266	Sales workers, furniture and home furnishings (4348)	137	0.1%
267	Sales workers, radio, TV, hi-fi, and appliances (4343, 4352)	45	0.0%
268	Sales workers, hardware and building supplies (4353)	105	0.1%
269-273	Sales workers, parts (4367)	93	0.1%
274	Sales wkrs., oth. commod. (4345, 4347, 4354, 4356, 4359, 4362, 4369)	2,000	1.9%
275	Sales counter clerks (4363)	237	0.2%
276	Cashiers (4364)	5,908	5.5%
277	Street and door-to-door sales workers (4366)	533	0.5%
278-282	News vendors (4365)	130	0.1%
283-302	*Sales Related Occupations*	*135*	*0.1%*
283	Demonstrators, promoters and models, sales (445)	135	0.1%
303-402	**Administrative Support Occupations, Including Clerical**	**20,731**	**19.3%**
303-307	*Supervisors, Administrative Support Occupations*	*228*	*0.2%*
303	Supervisors, general office (4511, 4513, 4514, 4516, 4519, 4529)	213	0.2%
305	Supervisors, financial records processing (4521)	15	0.0%
308-312	*Computer Equipment Operators*	*669*	*0.6%*
308	Computer operators (4612)	669	0.6%
313-315	*Secretaries, Stenographers, and Typists*	*3,850*	*3.6%*
313	Secretaries (4622)	2,577	2.4%
314	Stenographers (4623)	45	0.0%
315	Typists (4624)	1,228	1.1%

Chapter 8 (continued)

Table 28 (continued)

316-324	*Information Clerks*	*2,871*	*2.7%*
316	Interviewers (4642)	389	0.4%
317	Hotel clerks (4643)	111	0.1%
318	Transportation ticket and reservation agents (4644)	183	0.2%
319-322	Receptionists (4645)	1,839	1.7%
323-324	Information clerks, n.e.c. (4649)	349	0.3%
325-336	*Records Processing Occupations, Except Financial*	*1,608*	*1.5%*
325	Classified-ad clerks (4662)	54	0.1%
327	Order clerks (4664)	386	0.4%
328	Personnel clerks, except payroll and timekeeping (4692)	18	0.0%
329-334	Library clerks (4694)	111	0.1%
335	File clerks (4696)	899	0.8%
336	Records clerks (4699)	140	0.1%
337-344	*Financial Records Processing Occupations*	*1,744*	*1.6%*
337	Bookkeepers, accounting, and auditing clerks (4712)	1,264	1.2%
338	Payroll and timekeeping clerks (4713)	35	0.0%
339-342	Billing clerks (4715)	279	0.3%
343	Cost and rate clerks (4716)	142	0.1%
344	Billing, posting, and calculating machine operators (4718)	24	0.0%
345-347	*Duplicating, Mail and Other Office Machine Operators*	*91*	*0.1%*
345	Duplicating machine operators (4722)	39	0.0%
347	Office machine operators, n.e.c. (4729)	52	0.0%
348-353	*Communications Equipment Operators*	*653*	*0.6%*
348-352	Telephone operators (4732)	627	0.6%
353	Communications equipment operators, n.e.c. (4733, 4739)	26	0.0%
354-358	*Mail and Message Distributing Occupations*	*801*	*0.7%*
354	Postal clerks, except mail carriers (4742)	468	0.4%
355	Mail carriers, postal service (4743)	79	0.1%
356	Mail clerks, except postal service (4744)	241	0.2%
357-358	Messengers (4745)	13	0.0%
359-374	*Material Recording, Scheduling, and Distributing Clerks*	*2,216*	*2.1%*
359-362	Dispatchers (4751)	99	0.1%
363	Production coordinators (4752)	237	0.2%
364	Traffic, shipping, and receiving clerks (4753)	695	0.6%
365	Stock and inventory clerks (4754)	710	0.7%
368-372	Weighers, measurers, checkers, and samplers (4756, 4757)	143	0.1%
373	Expediters (4758)	207	0.2%
374	Material recording, scheduling, and distributing clerks, n.e.c. (4759)	125	0.1%
375-378	*Adjusters and Investigators*	*1,033*	*1.0%*
375	Insurance adjusters, examiners, and investigators (4782)	194	0.2%
376	Investigators and adjusters, except insurance (4783)	480	0.4%
377	Eligibility clerks, social welfare (4784)	109	0.1%
378	Bill and account collectors (4786)	250	0.2%
379-402	*Miscellaneous Administrative Support Occupations*	*4,967*	*4.6%*

Chapter 8 (continued)

Table 28 (continued)

379-382	General office clerks (463)	2,064	1.9%
383	Bank tellers (4791)	602	0.6%
384	Proofreaders (4792)	18	0.0%
385	Data-entry keyers (4793)	1,045	1.0%
386	Statistical clerks (4794)	208	0.2%
387-388	Teachers' aides (4795)	449	0.4%
389-402	Administrative support occupations, n.e.c. (4787, 4799)	581	0.5%
403-472	**SERVICE OCCUPATIONS**	**24,055**	**22.4%**
403-412	**Private Household Occupations**	**2,336**	**2.2%**
404	Cooks, private household (504)	23	0.0%
405	Housekeepers and butlers (505)	214	0.2%
406	Child care workers, private household (506)	403	0.4%
407-412	Private household cleaners and servants (502, 507, 509)	1,696	1.6%
413-432	**Protective Service Occupations**	1,341	**1.2%**
413-415	*Supervisors, Protective Service Occupations*	*34*	*0.0%*
415	Supervisors, guards (5113)	34	0.0%
416-417	*Firefighting and Fire Prevention Occupations*	*15*	*0.0%*
417	Firefighting occupations (5123)	15	0.0%
418-424	*Police and Detectives*	*107*	*0.1%*
418-422	Police and detectives, public service (5132)	57	0.1%
423	Sheriffs, bailiffs, and other law enforcement officers (5134)	50	0.0%
425-432	*Guards*	*1,185*	*1.1%*
425	Crossing guards (5142)	85	0.1%
426	Guards and police, except public service (5144)	1,045	1.0%
427-432	Protective service occupations, n.e.c. (5149)	55	0.1%
433-472	**Service Occupations, Except Protective and Household**	**20,378**	**18.9%**
433-444	*Food Preparation and Service Occupations*	*7,099*	*6.6%*
433	Supervisors, food preparation and service occupations (5211)	180	0.2%
434	Bartenders (5212)	313	0.3%
435	Waiters and waitresses (5213)	1,825	1.7%
436-437	Cooks (5214, 5215)	2,245	2.1%
438	Food counter, fountain and related occupations (5216)	347	0.3%
439-442	Kitchen workers, food preparation (5217)	357	0.3%
443	Waiters'/waitresses' assistants (5218)	466	0.4%
444	Miscellaneous food preparation occupations (5219)	1,366	1.3%
445-447	*Health Service Occupations*	*2,989*	*2.8%*
445	Dental assistants (5232)	106	0.1%
446	Health aides, except nursing (5233)	162	0.2%
447	Nursing aides, orderlies, and attendants (5236)	2,721	2.5%
448-455	*Cleaning and Building Service Occupations, Except Household*	*6,269*	*5.8%*
448	Supervisors, cleaning and building service workers (5241)	167	0.2%

Chapter 8 (continued)

Table 28 (continued)

449-452	Maids and housemen (5242, 5249)	1,254	1.2%
453	Janitors and cleaners (5244)	4,807	4.5%
454	Elevator operators (5245)	23	0.0%
455	Pest control occupations (5246)	18	0.0%
456-472	*Personal Service Occupations*	*4,021*	*3.7%*
456	Supervisors, personal service occupations (5251)	90	0.1%
457	Barbers (5252)	59	0.1%
458	Hairdressers and cosmetologists (5253)	1,257	1.2%
459-460	Attendants, amusement and recreation facilities (5254)	249	0.2%
462	Ushers (5256)	58	0.1%
464	Baggage porters and bellhops (5262)	16	0.0%
465	Welfare service aides (5263)	227	0.2%
466	Family child care providers (part 5264)	650	0.6%
467	Early childhood teacher's assistants (part 5264)	586	0.5%
468	Child care workers, n.e.c. (part 5264)	519	0.5%
469-472	Personal service occupations, n.e.c. (5258, 5269)	310	0.3%
473-502	**AGRICULTURE, FORESTRY, FISHING AND HUNTING OCCUPATIONS**	**2,245**	**2.1%**
473-476	**Farm Operators and Managers**	**21**	**0.0%**
473	Farmers, except horticultural (5512-5514)	21	0.0%
477-493	**Other Agricultural and Related Occupations**	**2,143**	**2.0%**
477-484	*Farm Occupations, Except Managerial*	*428*	*0.4%*
477-478	Supervisors, farm workers (5611)	16	0.0%
479-482	Farm workers (5612-5617)	337	0.3%
484	Nursery workers (5619)	75	0.1%
485-493	*Related Agricultural Occupations*	*1,715*	*1.6%*
485	Supervisors, related agricultural occupations (5621)	18	0.0%
486	Groundskeepers and gardeners, except farm (5622)	1,387	1.3%
487	Animal caretakers, except farm (5624)	104	0.1%
488	Graders and sorters, agricultural products (5625)	191	0.2%
489-493	Inspectors, agricultural products (5627)	15	0.0%
494-496	**Forestry and Logging Occupations**	**42**	**0.0%**
496	Timber cutting and logging occupations (573, 579)	42	0.0%
497-502	**Fishers, Hunters, and Trappers**	**39**	**0.0%**
497	Captains and other officers, fishing vessels (part 8241)	26	0.0%
498	Fishers (583)	13	0.0%

Chapter 8 (continued)

Table 28 (continued)

503-702	**PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS**	**9,487**	**8.8%**
503-552	**Mechanics and Repairers**	**44**	**0.0%**
503-504	Supervisors, mechanics and repairers (60)	44	0.0%
505-552	**Mechanics and Repairers, Except Supervisors**	**2,316**	**2.2%**
505-517	*Vehicle and Mobile Equipment Mechanics and Repairers*	*1,372*	*1.3%*
505-506	Automobile mechanics (part 6111)	739	0.7%
507	Bus, truck, and stationary engine mechanics (6112)	141	0.1%
508	Aircraft engine mechanics (6113)	42	0.0%
509-513	Small engine repairers (6114)	21	0.0%
514	Automobile body and related repairers (6115)	211	0.2%
515	Aircraft mechanics, except engine (6116)	132	0.1%
516	Heavy equipment mechanics (6117)	60	0.1%
518	Industrial machinery repairers (613)	13	0.0%
519-522	Machinery maintenance occupations (614)	13	0.0%
523-533	*Electrical and Electronic Equipment Repairers*	*337*	*0.3%*
523-524	Electronic repairers, communications & industrial eq. (6151, 6153, 6155)	89	0.1%
525	Data processing equipment repairers (6154)	38	0.0%
526	Household appliance and power tool repairers (6156)	37	0.0%
527-528	Telephone line installers and repairers (6157)	18	0.0%
529-532	Telephone installers and repairers (6158)	86	0.1%
533	Miscellaneous electrical & electronic equipment repairers (6152, 6159)	19	0.0%
534	Heating, air conditioning, and refrigeration mechanics (616)	50	0.0%
535-552	*Miscellaneous Mechanics and Repairers*	*563*	*0.5%*
535	Camera, watch, and musical instrument repairers (6171, 6172)	10	0.0%
536-537	Locksmiths and safe repairers (6173)	24	0.0%
538	Office machine repairers (6174)	15	0.0%
539-542	Mechanical controls and valve repairers (6175)	110	0.1%
544-546	Millwrights (6178)	41	0.0%
547-548	Specified mechanics and repairers, n.e.c. (6177, 6179)	92	0.1%
549-552	Not specified mechanics and repairers	271	0.3%
553-612	**Construction Trades**	**2,890**	**2.7%**
553-562	*Supervisors, Construction Occupations*	*321*	*0.3%*
555	Supervisors, electricians and power transmission installers (6314)	39	0.0%
556	Supervisors, painters, paperhangers, and plasterers (6315)	31	0.0%
557	Supervisors, plumbers, pipefitters, and steamfitters (6316)	251	0.2%
563-612	*Construction Trades, Except Supervisors*	*2,569*	*2.4%*
563-564	Brickmasons and stonemasons (part 6412, part 6413)	111	0.1%
564	Brickmason and stonemason apprentices (part 6412, part 6413)	34	0.0%
566	Carpet installers (part 6462)	81	0.1%
567-572	Carpenters (part 6422)	647	0.6%
569-572	Carpenter apprentices (part 6422)	11	0.0%
573-574	Drywall installers (6424)	120	0.1%
575-576	Electricians (part 6432)	177	0.2%

Chapter 8 (continued)

Table 28 (continued)

577-578	Electrical power installers and repairers (6433)	15	0.0%
579-582	Painters, construction and maintenance (6442)	538	0.5%
584	Plasterers (6444)	89	0.1%
585-587	Plumbers, pipefitters, and steamfitters (part 645)	268	0.2%
589-592	Glaziers (6464)	73	0.1%
594	Paving, surfacing, and tamping equipment operators (6466)	31	0.0%
595	Roofers (6468)	122	0.1%
597	Structural metal workers (6473)	116	0.1%
599-612	Construction trades, n.e.c. (6467, 6475, 6476, 6479)	136	0.1%
613-627	**Extractive Occupations**	**110**	**0.1%**
613	Supervisors, extractive occupations (632)	29	0.0%
614	Drillers, oil well (652)	81	0.1%
628-702	**Precision Production Occupations**	**4,171**	**3.9%**
628-633	Supervisors, production occupations (67, 71)	581	0.5%
634-655	*Precision Metal Working Occupations*	*893*	*0.8%*
634-635	Tool and die makers (part 6811)	29	0.0%
636	Precision assemblers, metal (6812)	107	0.1%
637-642	Machinists (part 6813)	372	0.3%
647-648	Precious stones and metals workers (Jewelers) (6822, 6866)	246	0.2%
649-652	Engravers, metal (6823)	13	0.0%
653-654	Sheet metal workers (part 6824)	126	0.1%
656-665	*Precision Woodworking Occupations*	*52*	*0.0%*
657	Cabinet makers and bench carpenters (6832)	23	0.0%
658	Furniture and wood finishers (6835)	29	0.0%
666-674	*Precision Textile, Apparel, and Furnishings Machine Workers*	*806*	*0.7%*
666	Dressmakers (part 6852, part 7752)	394	0.4%
667	Tailors (part 6852)	193	0.2%
668	Upholsterers (6853)	78	0.1%
669-673	Shoe repairers (6854)	76	0.1%
674	Miscellaneous precision apparel & fabric workers (6856, 6859, part 7752)	65	0.1%
675-685	*Precision Workers, Assorted Materials*	*1,044*	*1.0%*
675	Hand molders and shapers, except jewelers (6861)	21	0.0%
676	Patternmakers, lay-out workers, and cutters (6862)	16	0.0%
677	Optical goods workers (6864, part 7477, part 7677)	80	0.1%
683	Electrical and electronic equipment assemblers (6867)	799	0.7%
684-685	Miscellaneous precision workers, n.e.c. (6869)	128	0.1%
686-688	*Precision Food Production Occupations*	*488*	*0.5%*
686	Butchers and meat cutters (6871)	187	0.2%
687	Bakers (6872)	188	0.2%
688	Food batchmakers (6873, 6879)	113	0.1%
689-693	*Precision Inspectors, Testers, and Related Workers*	*160*	*0.1%*
689-692	Inspectors, testers, and graders (6881, 828)	124	0.1%
693	Adjusters and calibrators (6882)	36	0.0%

Chapter 8 (continued)

Table 28 (continued)

694-702	*Plant and System Operators*	*147*	*0.1%*
696-698	Stationary engineers (part 693, 7668)	147	0.1%
703-902	**OPERATORS, FABRICATORS, AND LABORERS**	**22,477**	**20.9%**
703-802	**Machine Operators, Assemblers, and Inspectors**	**12,639**	**11.7%**
703-716	*Metal Working and Plastic Working Machine Operators*	*260*	*0.2%*
704	Lathe and turning machine operators (7512)	75	0.1%
706	Punching & stamping press machine operators (7314, 7317, 7514, 7517)	63	0.1%
708	Drilling and boring machine operators (7318, 7518)	67	0.1%
709-712	Grinding, abrading, buffing, & polishing machine op. (7322, 7324, 7522)	55	0.1%
719-725	*Metal and Plastic Processing Machine Operators*	*163*	*0.2%*
719-722	Molding and casting machine operators (7315, 7342, 7515, 7542)	104	0.1%
723	Metal plating machine operators (7343, 7543)	59	0.1%
726-733	*Woodworking Machine Operators*	*68*	*0.1%*
727	Sawing machine operators (7433, 7633)	68	0.1%
734-737	*Printing Machine Operators*	*223*	*0.2%*
734	Printing press operators (7443, 7643)	147	0.1%
736	Typesetters and compositors (6841, 7642)	31	0.0%
737	Miscellaneous printing machine operators (6849, 7449, 7649)	45	0.0%
738-752	*Textile, Apparel, and Furnishings Machine Operators*	*3,164*	*2.9%*
739-742	Knitting, looping, taping, and weaving machine operators (7452, 7652)	43	0.0%
744	Textile sewing machine operators (7655)	2,401	2.2%
745-746	Shoe machine operators (7656)	26	0.0%
747	Pressing machine operators (7657)	304	0.3%
748	Laundering and dry cleaning machine operators (6855, 7658)	333	0.3%
749-752	Miscellaneous textile machine operators (7459, 7659)	57	0.1%
753-782	*Machine Operators, Assorted Materials*	*3,519*	*3.3%*
753	Cementing and gluing machine operators (7661)	65	0.1%
754	Packaging and filling machine operators (7462, 7662)	1,025	1.0%
756	Mixing and blending machine operators (7664)	185	0.2%
757	Separating, filtering, & clarifying machine operators (7476, 7666, 7676)	69	0.1%
759-762	Painting and paint spraying machine operators (7669)	108	0.1%
765	Folding machine operators (7474, 7674)	43	0.0%
766-767	Furnace, kiln, and oven operators, except food (7675)	23	0.0%
768	Crushing and grinding machine operators (part 7477, part 7677)	31	0.0%
769-772	Slicing and cutting machine operators (7478, 7678)	287	0.3%
773	Motion picture projectionists (part 7479)	34	0.0%
774-776	Photographic process machine operators (6863, 6868, 7671)	122	0.1%
777-778	Miscellaneous machine operators, n.e.c. (part 7479, 7665, 7679)	589	0.5%
779-782	Machine operators, not specified	938	0.9%
783-795	*Fabricators, Assemblers, and Hand Working Occupations*	*4,256*	*4.0%*
783	Welders and cutters (7332, 7532, 7714)	499	0.5%
784	Solderers and brazers (7333, 7533, 7717)	95	0.1%
785	Assemblers (772, 774)	3,428	3.2%
786	Hand cutting and trimming occupations (7753)	29	0.0%

Chapter 8 (continued)

Table 28 (continued)

787-788	Hand molding, casting, and forming occupations (7754, 7755)	35	0.0%
789-792	Hand painting, coating, and decorating occupations (7756)	130	0.1%
795	Miscellaneous hand working occupations (7758, 7759)	40	0.0%
796-802	*Production Inspectors, Testers, Samplers, and Weighers*	*986*	*0.9%*
796	Production inspectors, checkers, and examiners (782, 787)	563	0.5%
797	Production testers (783)	81	0.1%
798	Production samplers and weighers (784)	29	0.0%
799-802	Graders and sorters, except agricultural (785)	313	0.3%
803-863	**Transportation and Material Moving Occupations**	**3,772**	**3.5%**
803-822	*Motor Vehicle Operators*	*3,210*	3.0%
803	Supervisors, motor vehicle operators (8111)	78	*0.1%*
804-805	Truck drivers (8212-8214)	2,029	1.9%
806-807	Driver-sales workers (8218)	133	0.1%
808	Bus drivers (8215)	671	0.6%
809-812	Taxicab drivers and chauffeurs (8216)	229	0.2%
813	Parking lot attendants (874)	70	0.1%
828-842	*Water Transportation Occupations*	*58*	*0.1%*
829-832	Sailors and deckhands (8243)	58	0.1%
843-863	*Material Moving Equipment Operators*	*504*	*0.5%*
844	Operating engineers (8312)	54	0.1%
855	Grader, dozer, and scraper operators (8317)	11	0.0%
856-858	Industrial truck and tractor equipment operators (8318)	343	0.3%
859-863	Miscellaneous material moving equipment operators (8319)	96	0.1%
864-902	**Handlers, Equipment Cleaners, Helpers, and Laborers**	**6,066**	**5.6%**
865	Helpers, mechanics, and repairers (863)	39	0.0%
866-868	*Helpers, Construction, and Extractive Occupations*	*1,317*	*1.2%*
866	Helpers, construction trades (8641-8645, 8648)	55	0.1%
869-873	Construction laborers (871)	1,210	1.1%
874	Production helpers (861, 862)	52	0.0%
875-884	*Freight, Stock, and Material Handlers*	*4,710*	*4.4%*
875	Garbage collectors (8722)	57	0.1%
877	Stock handlers and baggers (8724)	1,027	1.0%
878-882	Machine feeders and offbearers (8725)	102	0.1%
883-884	Freight, stock, and material handlers, n.e.c. (8726)	553	0.5%
885-886	Garage and service station related occupations (873)	109	0.1%
887	Vehicle washers and equipment cleaners (875)	295	0.3%
888	Hand packers and packagers (8761)	1,037	1.0%
889-902	Laborers, except construction (8769)	1,530	1.4%
903-908	**MILITARY OCCUPATIONS (Includes only uniquely military occupations.** Other Armed Forces members are coded to civilian occupations)	**65**	**0.1%**
903	Commissioned officers and warrant officers	26	0.0%
904	Non-commissioned officers and other enlisted personnel	39	0.0%

Chapter 8 (continued)

Table 28 (continued)

909-999	**EXPERIENCED UNEMPLOYED NOT CLASSIFIED BY OCCUPATION**	**73,618**
909-999	Experienced unemployed not classified by occupation ("909" in PUMS)	4,354
0	Unemployed, last worked 6 years or more earlier ("0" in PUMS)	69,264

Chapter 8 (continued)

Table 29

INDUSTRIES EMPLOYING PUBLIC ASSISTANCE RECIPIENTS
16 TO 64 YEARS OF AGE

Los Angeles County, 1990 U.S. Census PUMS data

SIC CODE	*CENSUS CODE*	*INDUSTRY TITLE*	*PUBLIC ASSISTANCE RECIPIENTS* Number	Percent
		TOTAL NUMBER WITH INDUSTRY	**107,616**	**100.0%**
	000-039	**AGRICULTURE, FORESTRY AND FISHERIES**	**2,110**	**2.0%**
01	000-010	Agricultural production, crops	580	0.5%
02	011	Agricultural production, livestock	121	0.1%
074	012	Veterinary services	107	0.1%
078	013-020	Landscape and horticultural services	1,008	0.9%
071, 072, 075, 076	021-030	Agricultural services, n.e.c.	224	0.2%
09	032-039	Fishing, hunting and trapping	70	0.1%
	040-059	**MINING**	**214**	**0.2%**
10	040	Metal mining	21	0.0%
13	042	Oil and gas extraction	162	0.2%
14	043-059	Nonmetalic mining and quarrying, except fuel	31	0.0%
15, 16, 17	**060-099**	**CONSTRUCTION**	**4,719**	**4.4%**
	100-399	**MANUFACTURING**	**19,892**	**18.5%**
	100-229	**Nondurable Goods**	**8,538**	**7.9%**
	100-129	*Food and Kindred Products*	*1,264*	*1.2%*
201	100	Meat products	156	0.1%
202	101	Dairy products	54	0.1%
203	102-109	Canned, frozen and preserved fruits and vegtrables	199	0.2%
204	110	Grain mill products	20	0.0%
205	111	Bakery products	324	0.3%
206	112-119	Sugar and confectionery products	138	0.1%
208	120	Beverage industries	67	0.1%
207, 209	121	Miscellaneous food preparations and kindred products	220	0.2%
	122-129	Not specified food industries	86	0.1%
21	130-131	Tobacco manufacturers	21	0.0%
	132-159	*Textile Mill and Finished Textile Products*	*3,939*	*3.7%*
	132-150	*Textile Mill Products*	*439*	*0.4%*
225	132-139	Knitting mills	82	0.1%
226	140	Dyeing and finishing textiles, except wool and knit goods	26	0.0%
227	141	Carpet and rugs	15	0.0%
221-224, 228	142-149	Yarn, thread and fabric mills	298	0.3%
229	150	Miscellaneous textile mill products	18	0.0%

Chapter 8 (continued)

Table 29 (continued)

	151-159	*Apparel and Other Finished Textile Products*	*3,500*	*3.3%*
231-238	151	Apparel and accessories except knit	3,150	2.9%
239	152	Miscellaneous fabtricated textile products	350	0.3%
	160-170	*Paper and Allied Products*	*293*	*0.3%*
261-263	160	Pulp, paper, and paperboard mills	112	0.1%
267	161	Miscellaneous paper and pulp products	60	0.1%
265	162-170	Paperboard containers and boxes	121	0.1%
	171-179	*Printing, Publishing, and Allied Industries*	*1,421*	*1.3%*
271	171	Newspaper publishing and printing	349	0.3%
272-279	172-179	Printing, publishing, & allied industries ex. Newspapers	1,072	1.0%
	180-199	*Chemicals and Allied Products*	*675*	*0.6%*
282	180	Plastics, synthetics, and resins	84	0.1%
283	181	Drugs	94	0.1%
284	182-189	Soaps and cosmetics	57	0.1%
285	190	Paints, varnishes, and related products	115	0.1%
281, 286, 289	192	Industrial and miscellaneous chemicals	325	0.3%
291	200	Petroleum refining	145	0.1%
	210-219	*Rubber and Miscellaneous Plastic Products*	*569*	*0.5%*
301	210	Tires and inner tubes	39	0.0%
302-306	211	Other rubber products, and plastic footwear and belting	111	0.1%
308	212-219	Miscellaneous plastic products	419	0.4%
	220-229	*Leather and leather products*	*211*	*0.2%*
311	220	Leather tanning and finishing	59	0.1%
313, 314	221	Footwear, except rubber and plastic	114	0.1%
315-317, 319	222-229	Leather products, except footwear	38	0.0%
	230-399	**Durable Goods**	**11,354**	**10.6%**
		Furniture, Wood and Lumber Products	*715*	*0.7%*
	230-241	*Lumber and Wood Products Except Furniture*	*155*	*0.1%*
241	230	Logging	18	0.0%
242, 243	231	Sawmills, planing mills, and millwork	26	0.0%
245	232-240	Wood buildings and mobile homes	21	0.0%
244, 249	241	Miscellaneous wood products	90	0.1%
25	242-249	Furniture and fixtures	560	0.5%
	250-269	*Stone, Clay, Glass, and Concrete Products*	*356*	*0.3%*
321-323	250	Glass and glass products	224	0.2%
324, 327	251	Cement, concrete, gypsum, and plaster products	44	0.0%

Chapter 8 (continued)

Table 29 (continued)

325	252-260	Structural clay products	39	0.0%
	261	Pottery and related products	21	0.0%
328, 329	262-269	Miscellaneous nonmetallic mineral and stone products	28	0.0%
	270-309	*Metal Industries*	*1,317*	*1.2%*
331	270	Blast furnaces, steelworks, rolling and finishing mills	165	0.2%
332	271	Iron and steel foundries	39	0.0%
3334, pt. 334, 3353-3355, 3363, 3365	272	Primary aluminum industries	78	0.1%
3331, 3339, pt. 334, 3351, 3356, 3357, 3364, 3366, 3369, 339	280	Other primary metal industries	84	0.1%
342	281	Cutlery, handtools, and general hardware	309	0.3%
344	282	Fabricated structural metal products	158	0.1%
345	290	Screw machine products	20	0.0%
346	291	Metal forgings and stampings	94	0.1%
348	292	Ordnance	52	0.0%
341, 343, 347, 349	300	Miscellaneous fabricated metal products	300	0.3%
	301	Not specified metal industries	18	0.0%
	310-339	*Machinery and Computing Equipment*	*1,182*	*1.1%*
353	312-319	Construction and material handling machines	47	0.0%
354	320	Metalworking machinery	194	0.2%
3578, 3579	321	Office and accounting machines	21	0.0%
3571-3577	322	Computers and related equipment	204	0.2%
355, 356, 358, 359	331	Machinery, except electrical, n.e.c.	716	0.7%
	340-350	*Electrical Machinery, Equipment, and Supplies*	*1,842*	*1.7%*
363	340	Household appliances	70	0.1%
365, 366	341	Radio, TV, and communications equipment	344	0.3%
361, 362, 364, 367, 369	342-349	Electrical machinery, equipment, and supplies, n.e.c.	898	0.8%
	350	Not specified electrical machinery, equip., & supplies	530	0.5%
	351-370	*Transportation Equipment*	*2,397*	*2.2%*
371	351	Motor vehicles and motor vehicle equipment	448	0.4%
372	352	Aircraft and parts	1,212	1.1%
373	360	Ship and boat building and repairing	63	0.1%
374	361	Railroad locomotives and equipment	15	0.0%
376	362-369	Guided missiles, space vehicles, and parts	640	0.6%
375, 379	370	Cycles and miscellaneous transportation equipment	19	0.0%

Chapter 8 (continued)

Table 29 (continued)

	371-389	*Professional and Photographic Equipment and Watches*	*365*	*0.3%*
381, 382 except 3827	371	Scientific and controlling instruments	146	0.1%
3827, 384, 385	372-379	Medical, dental, and optical instruments and supplies	219	0.2%
394	390	Toys, amusement and sporting goods	391	0.4%
39 except 394	391	Miscellaneous manufacturing industries	569	0.5%
392-399	392	Not specified manufacturing industries	2,220	2.1%
	400-499	**TRANSPORTATION, COMMUNICATIONS, PUBLIC UTILITIES**	**5,756**	**5.3%**
	400-439	*Transportation*	*4,141*	*3.8%*
40	400	Railroads	45	0.0%
41 except 412	401	Bus service and urban transit	789	0.7%
412	402-409	Taxicab service	166	0.2%
421, 423	410	Trucking service	966	0.9%
422	411	Warehousing and storage	405	0.4%
43	412-419	U.S. Postal Service	677	0.6%
44	420	Water transportation	135	0.1%
45	421	Air transportation	502	0.5%
47	432-439	Services incidental to transportation	456	0.4%
	440-449	*Communications*	*1,201*	*1.1%*
483, 484	440	Radio and television broadcasting and cable	304	0.3%
481	441	Telephone communications	897	0.8%
	450-499	*Utilities and Sanitary Services*	*414*	*0.4%*
491	450	Electric light and power	49	0.0%
492, 496	451	Gas and steam supply systems	34	0.0%
493	452-469	Electric and gas, and other combinations	110	0.1%
494, 497	470	Water supply and irrigation	106	0.1%
495	471	Sanitary services	115	0.1%
	500-579	**WHOLESALE TRADE**	**4,434**	**4.1%**
	500-539	*Durable Goods*	*2,139*	*2.0%*
501	500	Motor vehicles and equipment	211	0.2%
502	501	Furniture and home furnishings	231	0.2%
503	502-509	Lumber and construction materials	97	0.1%
504	510	Professional and commercial equipment and supplies	249	0.2%
505	511	Metals and minerals, except petroleum	138	0.1%
506	512-520	Electrical goods	243	0.2%
507	521-529	Hardware, Plumbing and heating supplies	192	0.2%
508	530	Machinery, equipment, and supplies	403	0.4%
5093	531	Scrap and waste materials	232	0.2%
509 except 5093	532-539	Miscellaneous wholesale durable goods	143	0.1%

Chapter 8 (continued)

Table 29 (continued)

	540-579	*Nondurable Goods*	*2,295*	*2.1%*
511	540	Paper and paper products	141	0.1%
512, 516	541	Drugs, chemicals and allied products	143	0.1%
513	542-549	Apparel, fabrics, and notions	372	0.3%
514	550	Groceries and related products	697	0.6%
517	552-559	Petroleum products	91	0.1%
518	560	Alcoholic beverages	32	0.0%
5191	561	Farm supplies	68	0.1%
5192-5199	562-570	Miscellaneous wholesale, nondurable goods	118	0.1%
	571-579	Not specified wholesale trade	633	0.6%
	580-699	**RETAIL TRADE**	**22,801**	**21.2%**
521, 523	580	Lumber and building material retailing	236	0.2%
525	581	Hardware stores	87	0.1%
527	590	Mobile home dealers	10	0.0%
		General Merchandise Stores	*3,136*	*2.9%*
531	591	Department stores	2,656	2.5%
533	592-599	Variety stores	320	0.3%
539	600	Miscellaneous general merchandise stores	160	0.1%
	601-610	*Food, Bakery and Dairy Stores*	*2,904*	*2.7%*
541	601	Grocery stores	2,330	2.2%
545	602-609	Dairy products stores	143	0.1%
546	610	Retail bakeries	431	0.4%
542, 543, 544, 549	611	Food stores, n.e.c.	124	0.1%
551, 552	612-619	Motor vehicle dealers	637	0.6%
553	620	Auto and home supply stores	193	0.2%
554	621	Gasoline service stations	514	0.5%
555, 556, 557, 559	622	Miscellaneous vehicle dealers	16	0.0%
56 except 566	623-629	Apparel and accessory stores, except shoe	1,081	1.0%
566	630	Shoe stores	106	0.1%
571	631	Furniture and home furnishing stores	394	0.4%
572	632	Household appliance stores	119	0.1%
5731, 5734	633-639	Radio, TV, and computer stores	195	0.2%
5735, 5736	640	Music stores	245	0.2%
58	641	Eating and drinking places	7,870	7.3%
591	642-649	Drug stores	470	0.4%
592	650	Liquor stores	179	0.2%
5941, 5945, 5946	651	Sporting goods, bicycles, and hobby stores	517	0.5%
5942, 5943	652-659	Book and stationery stores	213	0.2%
5944	660	Jewelry stores	257	0.2%
5947	661	Gift, novelty, and souvenir shops	219	0.2%
5949	662	Sewing, needlework and piece good stores	118	0.1%

Chapter 8 (continued)

Table 29 (continued)

5961	663-669	Catalog and mail order houses	69	0.1%
5962	670	Vending machine operators	151	0.1%
5963	671	Direct selling establishments/Fuel dealers	610	0.6%
598	672-680	Fuel dealers	23	0.0%
5992	681	Retail florists	109	0.1%
593, 5948, 5993-5995, 5999	682-690	Miscellaneous retail stores	1,281	1.2%
	691-699	Not specified retail trade	718	0.7%
	700-720	**FINANCE, INSURANCE AND REAL ESTATE**	**5,215**	**4.8%**
60 except 603 and 606	700	Banking	1,589	1.5%
603, 606	701	Savings institutions, including credit unions	250	0.2%
61	702-709	Credit agencies, n.e.c.	173	0.2%
62, 67	710	Security, commodity brokerage, & investment companies	308	0.3%
63, 64	711	Insurance	1,169	1.1%
65	712-720	Real estate, including real estate-insurance offices	1,726	1.6%
	721-899	**SERVICES**	**39,713**	**36.9%**
	721-760	**Business and Repair Services**	**8,445**	**7.8%**
731	721	Advertising	113	0.1%
734	722-730	Services to dwellings and other buildings	2,098	1.9%
736	731	Personnel supply services	1,853	1.7%
737	732-739	Computer and data processing services	580	0.5%
7381, 7382	740	Detective and protective services	611	0.6%
732, 733, 735, 7383-7389	741	Business services, n.e.c.	1,670	1.6%
751	742-749	Automotive rental and leasing, without drivers	120	0.1%
752, 7542	750	Automotive parking and carwashes	266	0.2%
753, 7549	751	Automotive repair and related services	836	0.8%
762, 7694	752-759	Electrical repair shops	21	0.0%
763, 764, 7692, 7699	760	Miscellaneous repair services	277	0.3%
	761-799	**Personal Services**	**6,912**	**6.4%**
88	761	Private households	2,710	2.5%
701	762-769	Hotels and motels	1,533	1.4%
702, 703, 704	770	Lodging places, except hotels and motels	50	0.0%
721 except part 7219	771	Laundry, cleaning and garment services	722	0.7%
723	772-779	Beauty shops	1,168	1.1%
724	780	Barber shops	57	0.1%
725	782-789	Shoe repair shops	55	0.1%
Part 7219	790	Dressmaking shops	87	0.1%
722, 729	791-799	Miscellaneous personal services	530	0.5%

Chapter 8 (continued)

Table 29 (continued)

	800-811	**Entertainment and Recreation Services**	**3,049**	**2.8%**
	800	Theaters and motion pictures	1,696	1.6%
	801	Video tape rental	37	0.0%
	802-809	Bowling centers	34	0.0%
	810-811	Miscellaneous entertainment and recreation services	1,282	1.2%
	812-899	**Professional and Related Services**	**21,307**	**19.8%**
801, 803	812-819	Offices and clinics of physicians	1,099	1.0%
802	820	Offices and clinics of dentists	228	0.2%
8041	821	Offices and clinics of chiropractors	70	0.1%
8042	822-829	Offices and clinics of optometrists	57	0.1%
8043, 8049	830	Offices and clinics of health practitioners, n.e.c.	39	0.0%
806	831	Hospitals	4,071	3.8%
805	832	Nursing and personal care facilities	962	0.9%
807, 808, 809	840	Health services, n.e.c.	1,281	1.2%
81	841	Legal services	470	0.4%
821	842-849	Elementary and secondary schools	4,180	3.9%
822	850	Colleges and universities	1,157	1.1%
824	851	Vocational schools	84	0.1%
823	852-859	Libraries	140	0.1%
829	860	Educational services, n.e.c.	271	0.3%
833	861	Job training and vocational rehabilitation services	884	0.8%
Part 835	862	Child day care services	982	0.9%
Part 835	863-869	Family child care homes	694	0.6%
836	870	Residential care facilities, without nursing	615	0.6%
832, 839	871	Social services, n.e.c.	1,609	1.5%
84	872	Museums, art galleries, and zoos	76	0.1%
863	873-879	Labor unions	39	0.0%
866	880	Religious organizations	488	0.5%
861, 862, 864, 865, 869	881	Membership organizations, n.e.c.	300	0.3%
871	882-889	Engineering, architectural, and surveying services	206	0.2%
872	890	Accounting, auditing, and bookkeeping services	449	0.4%
873	891	Research, development, and testing services	288	0.3%
874	892	Management and public relations services	338	0.3%
899	893-899	Miscellaneous professional and related services	230	0.2%
	900-939	**PUBLIC ADMINISTRATION**	**2,667**	**2.5%**
911-913	900	Executive and legislative offices	57	0.1%
919	901	General government, n.e.c.	630	0.6%
92	910	Justice, public order, and safety	601	0.6%
93	921	Public finance, taxation, and monetary policy	309	0.3%
94	922	Administration of human resource programs	503	0.5%
96	931	Administration of economic programs	373	0.3%
97	932	National security and international affairs	194	0.2%

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Table 29 (continued)

940-991	**ACTIVE DUTY MILITARY**	**95**	**0.1%**
942	Navy	95	0.1%
	TOTAL NUMBER WITH INDUSTRY CLASSIFICATION	**107,616**	**100.0%**
992-999	**EXPERIENCED UNEMPLOYED NOT CLASSIFIED BY INDUSTRY**	**73,618**	
992	Unemployed, last worked 6 or more years earlier	4,354	
0	Unemployed, last worked 6 or more years earlier (0 in PUMS)	69,264	

Chapter 9

This section contains tables with detailed occupational data created for the evaluation of jobs with limited training and experience requirements that were considered appropriate for a large share of the adult AFDC population in Los Angeles County. Also presented here is a description of Occupational Employment Statistics (OES) system administered in California by the California Employment Development Department (EDD), as well as the method used to match OES occupational codes with those of the Dictionary of Occupational Titles coding system.

The OES Occupational System

The OES system is directed by the Bureau of Labor Statistics, and administered by individual sates. Extensive and detailed employer surveys are conducted continuously, with the complete Los Angeles economy surveyed over a three-year cycle. There are approximately 800 occupations defined in this system. The OES survey forms the basis of EDD's published occupational employment estimates and projections for California. In this study, the OES occupational estimates used were produced in 1994, and contain employment data for 1990 and updates for 1994, and 1996. The projections were made for the year 1999. While most of these projections are still useful, a few industries have not kept to their original employment trend. The two most obvious cases are the apparel manufacturing sector and the motion picture production industry, both of which have exceeded EDD's projections for 1999. This has resulted in 1996 employment estimates that are above the original 1999 projections in a few occupations, most notably (in the tables shown below) in the estimates for sewing-machine operators.

A new set of occupational projections recently became available from EDD, but not in time to be incorporated into this report. While the new occupational growth-rate projections are somewhat higher, overall, than the earlier projections, the rates of growth by occupation are not significantly different from those made in the 1994 projections.

Occupational Classification Systems

The OES classification system and the U.S. Bureau of the Census occupational coding structures are both based on a system developed by the U.S. Department of Commerce called the Standard Occupational Coding System (SOC). The OES system can be matched to the census system directly, but many of the census codes include several different OES classifications.

The Dictionary of Occupational Titles (DOT) of the U.S. Department of Labor is the occupational system that is the foundation for all other commonly used systems, such as the OES and the coding system used by the U.S. Bureau of the Census. The DOT system is much more detailed than any other comprehensive occupational coding system, and has over 12,000 defined categories based on original research. It also contains codes for each occupation that describe

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many job characteristics, including, among others, educational requirements, training time, physical demands, and typical work-environment conditions.

Employment Trend Data Coded by Census Code

Tables 30 and 31 present occupational data summed by census occupational code for Los Angeles County. The data were developed by matching EDD occupational employment data and projections with a list of census occupations derived from the Los Angeles 1990 PUMS file in which at least 100 or more females aged 18-64 who were receiving public assistance, had children under 18 years of age, no work disabilities, and who reported work experience. Table 30 shows annual average employment for these occupations for the years 1990, 1994, 1996, and a projection to 1999 (made in 1994). (Because these projections are old, in some occupations the projections have not been corrected for the unexpectedly strong growth rates that have occurred since 1994 in a few industries, most notably motion picture production and apparel manufacturing. Some occupations in these industries have 1999 projections below their current levels. Most other occupations have not departed noticeably from their earlier projections. New projections are now available from EDD, but they were not available in time to incorporate into this report.) Table 31 provides an estimate for the expected annual number of job openings that arise from worker replacement caused when workers leave the labor force permanently or for an extended period of time, and shows the average-annual job openings expected for the 1996-99 period.

Table 32 shows the percent distribution by poverty status of persons working in these occupations (as shown by the 1990 PUMS file) applied to the average-annual job openings expected between 1996 and 1999 for these census occupations. The list in this table excludes occupations requiring a high level of education and experience.

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Table 30
The Fifty Principal Occupations* in Which Persons Receiving Public Assistance Reported Work Experience in the 1990 Census With Employment Trends and Projections Based on Data Developed by the Employment Development Department

Census code	Title	Ann. avg 1990	Ann. avg 1994	Ann. avg 1996	Proj. avg 1999	Total chg. 90-94	Total chg. 94-96	Proj. Ann. chg. 96-99	Ann. chg.
	Total, all occupations	2,898,701	2,583,622	2,680,436	2,826,117	-315,079	96,814	145,681	48,560
017	Managers, food serving	9,660	8,959	9,272	10,389	-701	313	1,117	372
022	Managers and administr	269,605	236,651	243,108	257,016	-32,954	6,457	13,908	4,636
095	Registered nurses	53,998	54,594	57,476	60,081	596	2,882	2,605	868
156	Teachers, elementary s	36,605	37,662	36,127	38,143	1,057	-1,535	2,016	672
243	Supervisors and propri	75,138	66,799	68,958	76,217	-8,339	2,159	7,259	2,420
259	Sales representatives,	88,863	74,621	76,694	80,912	-14,242	2,073	4,218	1,406
264	Sales workers, apparel	137,209	112,825	117,668	130,230	-24,384	4,843	12,562	4,187
274	Sales workers, other c	236,769	196,490	203,880	222,186	-40,279	7,390	18,306	6,102
276	Cashiers	73,503	64,684	67,992	73,937	-8,819	3,308	5,945	1,982
308	Computer operators	9,404	8,110	8,172	6,789	-1,294	62	-1,383	-461
313	Secretaries	114,171	104,538	104,526	109,684	-9,633	-12	5,158	1,719
315	Typists	40,170	39,794	40,299	34,083	-376	505	-6,216	-2,072
319	Receptionists	42,146	39,944	41,545	45,545	-2,202	1,601	4,000	1,333
335	File clerks	11,749	10,916	11,184	11,686	-833	268	502	167
337	Bookkeepers, accountin	82,627	74,838	76,470	77,023	-7,789	1,632	553	184
348	Telephone operators	19,930	20,356	20,418	16,919	426	62	-3,499	-1,166
364	Traffic, shipping, and	43,464	37,778	39,705	45,204	-5,686	1,927	5,499	1,833
365	Stock and inventory cl	85,910	73,619	76,865	82,700	-12,291	3,246	5,835	1,945
379	General office clerks	124,783	115,842	116,843	126,600	-8,941	1,001	9,757	3,252
383	Bank tellers	26,665	20,730	19,882	22,224	-5,935	-848	2,342	781
385	Data-entry keyers	19,645	17,677	18,048	18,495	-1,968	371	447	149
389	Administrative support	119,032	107,649	106,905	117,976	-11,383	-744	11,071	3,690
426	Guards and police, exc	42,481	43,218	48,082	51,128	737	4,864	3,046	1,015
435	Waiters and waitresses	60,903	56,507	58,825	63,633	-4,396	2,318	4,808	1,603

436	Cooks	52,517	48,918	50,878	55,682	-3,599	1,960	
4,804	1,601							
444	Miscellaneous food pre	53,524	50,359	51,729	58,088	-3,165	1,370	
6,359	2,120							
447	Nursing aides, orderli	29,023	30,881	32,506	34,251	1,858	1,625	
1,745	582							
449	Maids and housemen	24,254	22,178	22,642	23,587	-2,076	464	
945	315							
453	Janitors and cleaners	52,521	47,427	49,771	49,417	-5,094	2,344	
-354	-118							
458	Hairdressers and cosme	11,647	10,500	10,964	12,316	-1,147	464	
1,352	451							
483	Marine life cultivatio	2,967	2,758	2,865	3,514	-209	107	
649	216							
505	Automobile mechanics	27,102	22,869	24,467	26,107	-4,233	1,598	
1,640	547							
567	Carpenters	21,107	16,430	16,961	17,132	-4,677	531	
171	57							
628	Supervisors, productio	59,042	46,205	46,573	51,996	-12,837	368	
5,423	1,808							
744	Textile sewing machine	52,832	52,941	62,178	55,292	109	9,237	-
6,886	-2,295							
754	Cackaging and filling	19,667	18,452	19,403	17,170	-1,215	951	-
2,233	-744							
777	Miscellaneous machine	63,852	55,992	57,559	59,761	-7,860	1,567	
2,202	734							
785	Assemblers	153,747	133,313	140,342	145,946	-20,434	7,029	
5,604	1,868							
796	Production inspectors,	126,988	103,214	106,246	115,144	-23,774	3,032	
8,898	2,966							
804	Truck drivers	81,435	75,179	78,969	82,757	-6,256	3,790	
3,788	1,263							
808	Bus drivers	13,398	12,968	12,940	13,773	-430	-28	
833	278							
869	Construction laborers	53,884	49,270	53,995	53,959	-4,614	4,725	
-36	-12							
877	Stock handlers and bag	26,739	24,025	25,838	25,660	-2,714	1,813	
-178	-59							
883	Freight, stock, and ma	30,091	26,982	28,892	28,922	-3,109	1,910	
30	10							
888	Hand packers and packa	28,353	25,810	26,431	27,792	-2,543	621	
1,361	454							
889	Laborers, except const	89,581	82,150	89,343	89,051	-7,431	7,193	
-292	-97							

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Table 31
Employment Trends and Projections for Occupations in Which at Least 100 or More Single Women, Aged 18-64, Receiving Public Assistance, with Children under 18, With No Disabilities, and Who Reported Work Experience in the 1990 Census, Showing Estimated AFDC Adult Job Applicants with Work Experience (Based on Data Developed by the Employment Development Department)

Census Code	Title	Annual Average 1996	Projected Average 1999	Projected Change 96-99	Annual Change 96-99	AFDC Job Applicants
	Total, all occupations listed	2,803,176	3,006,647	203,471	67,824	108,622
017	Managers, food serving	9,272	10,389	1,117	372	613
022	Managers and administr	242,803	257,634	14,831	4,944	1,094
027	Pursonnel, training, a	10,444	11,909	1,465	488	716
037	Management related occ	68,422	87,357	18,935	6,312	984
095	Registered nurses	56,423	60,092	3,669	1,223	1,498
155	Teachers, prekindergar	12,007	15,404	3,397	1,132	1,028
156	Teachers, elementary s	36,127	38,143	2,016	672	1,641
174	Social workers	18,589	22,541	3,952	1,317	831
207	Licensed practical nur	45,277	47,709	2,432	811	547
208	Health technologists a	21,055	23,939	2,884	961	580
243	Supervisors and propri	69,177	76,659	7,482	2,494	2,127
264	Sales workers, apparel	117,617	130,230	12,613	4,204	1,170
274	Sales workers, other c	203,825	222,188	18,363	6,121	2,937
275	Sales counter clerks	8,094	8,978	884	295	880
276	Cashiers	67,965	73,937	5,972	1,991	11,260
308	Computer operators	7,978	6,789	-1,189	-396	1,220
313	Secretaries	103,743	109,715	5,972	1,991	4,599
315	Typists	40,032	34,119	-5,913	-1,971	3,052
319	Receptionists	41,530	45,548	4,018	1,339	4,233
323	Information clerks, n.	41,549	45,573	4,024	1,341	891
327	Order clerks	47,095	51,200	4,105	1,368	733
335	File clerks	11,189	11,692	503	168	1,061
337	Bookkeepers, accountin	76,276	77,101	825	275	2,538
339	Billing clerks	15,237	15,467	230	77	870
343	Cost and rate clerks	20,740	22,467	1,727	576	563
348	Telephone operators	20,472	17,037	-3,435	-1,145	1,734
354	Postal clerks, exc. ma	2,214	2,946	732	244	1,389
364	Traffic, shipping, and	46,904	54,822	7,918	2,639	995
365	Stock and inventory cl	83,803	92,407	8,604	2,868	1,105
378	Bill and account colle	8,068	9,155	1,087	362	864
379	General office clerks	116,414	126,810	10,396	3,465	4,736
383	Bank tellers	19,882	22,224	2,342	781	1,034
385	Data-entry keyers	18,044	18,554	510	170	2,346
387	Teachers' aides	37,024	41,677	4,653	1,551	1,023
389	Administrative support	106,515	119,058	12,543	4,181	1,225
435	Waiters and waitresses	58,825	63,633	4,808	1,603	3,500
436	Cooks	50,840	55,682	4,842	1,614	3,320
438	Food counter, fountain	45,384	46,192	808	269	563
443	Waiters'/waitresses' a	20,327	21,482	1,155	385	596
444	Miscellaneous food pre	51,729	58,088	6,359	2,120	930
447	Nursing aides, orderli	31,996	34,251	2,255	752	4,260

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Table 31 (continued)

Census Code	Title	Annual Average 1996	Projected Average 1999	Projected Change 96-99	Annual Change 96-99	AFDC Job Applicants
449	Maids and housemen	22,642	23,587	945	315	1,608
453	Janitors and cleaners	49,915	50,041	126	42	4,463
458	Hairdressers and cosme	10,964	12,316	1,352	451	2,565
468	Child care workers, n.	5,785	7,021	1,236	412	952
628	Supervisors, productio	46,314	52,118	5,804	1,935	640
666	Dressmakers	3,937	3,869	-68	-23	744
683	Electrical and electro	48,523	52,071	3,548	1,183	1,422
744	Textile sewing machine	62,177	55,292	-6,885	-2,295	4,342
754	Packaging and filling	19,403	17,170	-2,233	-744	1,684
785	Assemblers	141,207	147,364	6,157	2,052	4,167
796	Production inspectors,	113,270	124,636	11,366	3,789	919
799	Graders and sorters, e	12,611	12,528	-83	-28	580
808	Bus drivers	12,940	13,773	833	278	1,909
877	Stock handlers and bag	25,845	25,670	-175	-58	2,346
888	Hand packers and packa	26,430	27,792	1,362	454	2,341
889	Laborers, except const	90,306	90,601	295	98	656

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Table 32
Poverty Status of Workers in Average-Annual Job Openings Expected between 1966 and 1999 in The Principal Occupations* in Which Persons Receiving Public Assistance Reported Work Experience in the 1990 Census, With Projected Job Openings Based on Data Developed by the Employment Development Department

Census Code	Title	Annual Job Openings	Openings Paying 0 to 50% of Poverty	Openings Paying 51% to 100% of Poverty	Openings Paying 101% to 150% of Poverty	Openings Paying 151% + of Poverty	Openings Paying Up to 150% of Poverty	Percent of All Openings
	Total, all occupations	81,412	3,154	4,740	9,043	64,474	16,937	20.8
264	Sales workers, apparel	9,321	.	.	.	9,321	.	.
274	Sales workers, other c	14,624	937	695	1,329	11,663	2,961	20.2
276	Cashiers	3,296	80	.	512	2,704	592	18.0
308	Computer operators	-309	-24	.	.	-285	-24	7.8
313	Secretaries	2,508	60	136	57	2,256	252	10.1
315	Typists	-990	.	.	.	-990	.	.
319	Receptionists	2,382	203	.	60	2,118	263	11.1
335	File clerks	370	.	.	.	370	.	.
337	Bookkeepers, accountin	3,331	.	.	242	3,089	242	7.3
348	Telephone operators	-544	.	.	.	-544	.	.
364	Traffic, shipping, and	3,612	.	511	474	2,627	985	27.3
365	Stock and inventory cl	4,784	373	.	1,447	2,964	1,820	38.0
379	General office clerks	7,330	.	.	156	7,174	156	2.1
383	Bank tellers	979	.	.	.	979	.	.
385	Data-entry keyers	390	.	.	.	390	.	.
435	Waiters and waitresses	2,432	120	309	309	1,694	738	30.3
436	Cooks	2,837	198	343	517	1,778	1,058	37.3
444	Miscellaneous food pre	3,532	418	283	960	1,871	1,661	47.0
447	Nursing aides, orderli	2,023	233	.	209	1,581	442	21.8
449	Maids and housemen	1,369	.	660	.	709	660	48.2
453	Janitors and cleaners	2,463	147	279	284	1,753	710	28.8
458	Hairdressers and cosme	776	107	.	181	489	288	37.0
744	Textile sewing machine	-231	-6	-16	-61	-148	-83	35.8
754	Cackaging and filling	-137	-19	.	-18	-100	-37	27.0
785	Assemblers	4,967	245	754	641	3,327	1,639	33.0
796	Production inspectors,	6,342	.	298	1,259	4,785	1,557	24.5
808	Bus drivers	600	.	.	.	600	.	.
877	Stock handlers and bag	-58	-5	.	-5	-49	-10	16.7
888	Hand packers and packa	1,117	.	380	73	665	453	40.5
889	Laborers, except const	2,296	87	110	416	1,683	613	26.7

*Accounting for two-thirds of all respondents with work experience. Occupations requiring much education and experience, such as Managers and Administrators not included.

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Employment Trend Data Coded by DOT Code (tables 33, 34, and 35)

The process of obtaining employment categorized by DOT definitions for Los Angeles involved first creating a file that contained weights for each DOT category within its related OES code. For this purpose, a file was obtained that contained all job applicants at EDD offices in Los Angeles over a three-year period, and who had been assigned a DOT code based on their primary work experience. There were well over 200,000 applicants in the file. (The number of job applicants in a DOT category tends to reflect the relative size of that DOT within an OES category.) Using a conversion system that matches DOT and OES codes, a percent distribution of employment weights of DOT codes within the broader OES codes was produced. This distribution was used to distribute employment within each OES code by DOT occupation.

Once an employment distribution by DOT code was completed, that distribution was applied to each year of the occupational data (organized by OES code) for the years 1990, 1994, 1996, and 1999. The next step involved selecting DOT categories that could be considered as appropriate for most AFDC adults. Several factors were taken into account in this process. These were: the educational level, the last year worked, years of work experience, and physical strength.

The detail for this data is shown in Table 35 for DOT occupational categories in which an estimated 100 or more workers were employed in 1996. The table is sorted in order of OES code and the related DOT code. Table 33 shows the same employment trend data as presented in Table 35, summed to OES occupation for all of the related DOT specialties shown on Table 35. Table 34 summarizes the job opening data (also at the OES-code level). It also incorporates the results of an OES employer wage survey recently conducted by EDD. The wage of the first quartile is shown (when an hourly wage was available from the survey). Also shown is an hourly wage at the OES level, which is an average of the median wages offered for workers in the related DOT specialties. (Employment totals by OES code in this table only include employment estimates for DOT categories that were appropriate for most AFDC adults. Therefore, these numbers will be smaller than other published estimates for these OES occupations in Los Angeles County.)

Table 33
Employment Trends in DOT Specialies within OES Occupations
Considered Appropriate for AFDC Recipients, Showing
Annual Estimates 1990, 1994, 1996, and Projections to 1999
Los Angeles County

Oes code	OES Title	Ann. avg 1990	Ann. avg 1994	Ann. avg 1996	Proj. avg 1999	Total chg. 90-94	Total chg. 94-96	Proj. chg. 96-99
	Total, all occupational categories	1,303,942	1,181,066	1,222,850	1,288,768	-121,877	41,868	64,770
15011	Property and real estate managers and ad	3,354	3,040	2,914	3,405	-314	-126	491
15026	Food service and lodging managers	2,917	2,706	2,800	3,137	-212	95	337
21111	Tax preparers	3,714	3,232	2,799	4,301	-482	-433	1,502
21199	All other financial specialists	1,724	1,368	1,383	1,716	-355	14	334
21511	Personnel, training, and labor relations	2,304	2,012	1,928	2,373	-292	-84	445
21911	Compliance officers and enforcement insp	282	279	233	319	-4	-46	86
22599	All other engineering and related techni	2,330	1,995	2,012	2,160	-335	17	148
24502	Biological, agricultural, and food techn	352	275	254	396	-77	-20	142
24599	All other physical and life science tech	810	678	605	787	-132	-73	182
27308	Human services workers	1,041	1,103	1,127	1,593	62	24	466
28308	Title searchers	888	708	551	772	-180	-157	221
31399	All other teachers and instructors	1,372	1,405	1,347	1,554	33	-58	208
31505	Technical assistants, library	1,026	996	1,303	1,113	-30	307	-190
32518	Pharmacy technicians	2,033	1,927	1,942	2,159	-106	15	217
32905	Medical and clinical laboratory technici	3,155	3,182	3,370	3,302	27	188	-68
32926	Electrocardiograph technicians	526	523	553	456	-3	30	-97

32999	All other health professionals, paraprof	785	762	734	892	-23	-27	158
34017	Announcers, radio and television	480	417	463	467	-63	46	4
34023	Photographers	666	689	682	775	23	-7	94
34056	Producers, directors, actors, and other	6,442	8,062	10,666	8,252	1,620	2,604	-2,414
39999	All other professional, paraprofessional	3,100	2,884	2,685	3,536	-216	-200	851
41002	First-line supervisors and manager/super	269	227	235	269	-41	8	33
43014	Sales agents, securities, commodities, a	353	347	331	365	-6	-16	34
43017	Sales agents, selected business services	6,093	6,127	6,668	6,512	34	542	-156
43021	Travel agents	6,015	5,391	5,365	6,049	-624	-26	684
43023	Sales agents, advertising	393	352	363	394	-41	11	31
43099	All other sales representatives and sale	2,024	1,946	1,895	2,079	-78	-52	185
49005	Sales representatives, scientific and re	2,394	1,864	1,959	1,992	-530	95	34

Table 33 (continued)

Proj. Oes chg. code	OES Title	Ann. avg 1990	Ann. avg 1994	Ann. avg 1996	Proj. avg 1999	Total chg. 90-94	Total chg. 94-96	Proj. chg. 96-99
49008	Sales representatives, except scientific	48,658	40,530	41,553	44,504	-8,127	1,022	2,951
49011	Salespersons, retail	130,624	107,410	111,972	123,979	-23,214	4,562	12,008
49014	Salespersons, parts	9,435	7,712	8,052	8,538	-1,723	340	486
49017	Counter and rental clerks	7,607	6,498	7,023	7,789	-1,109	524	767
49023	Cashiers	73,494	64,676	67,957	73,928	-8,818	3,281	5,971
49026	Telemarketers, door-to-door sales worker	6,977	6,892	6,932	7,064	-86	40	133
49032	Demonstrators, promoters, and models	1,867	1,843	2,289	1,995	-24	446	-294
49999	All other sales and related workers	14,633	13,583	13,803	14,285	-1,050	219	483
51002	First-line supervisors and manager/super	1,974	1,786	1,838	2,017	-187	52	179
53102	Tellers	26,115	20,302	19,472	21,765	-5,813	-831	2,294
53108	Transit clerks	279	218	202	207	-61	-16	5
53114	Credit authorizers	686	565	566	665	-121	1	99
53117	Credit checkers	1,764	1,547	1,457	1,843	-217	-90	386
53121	Loan and credit clerks	6,615	6,548	5,683	7,227	-67	-865	1,544
53123	Adjustment clerks	16,081	13,787	15,639	16,484	-2,294	1,851	845
53126	Statement clerks	539	437	411	402	-102	-26	-9
53128	Brokerage clerks	1,612	1,612	1,549	1,519	0	-63	-30
53302	Insurance adjusters, examiners, and inve	816	710	628	908	-106	-82	280
53311	Insurance claims clerks	4,074	3,718	3,386	4,783	-356	-332	1,397
53314	Insurance policy processing clerks	5,225	4,251	3,842	4,572	-974	-409	730

53502	Welfare eligibility workers and intervie	898	870	841	954	-27	-29
113							
53505	Investigators, clerical	361	344	327	331	-17	-17
4							
53508	Bill and account collectors	8,559	7,790	7,987	9,063	-769	197
1,076							
53802	Travel clerks	595	524	525	575	-71	1
50							
53805	Reservation and transportation ticket ag	7,190	6,550	6,775	7,149	-640	225
374							
53808	Hotel desk clerks	3,075	2,504	2,569	3,125	-571	65
556							
53902	Library assistants and bookmobile driver	3,637	3,376	3,522	3,771	-261	146
249							
53908	Advertising clerks	742	702	651	814	-40	-51
163							
53911	Proofreaders and copy markers	1,036	933	874	933	-103	-59
59							
53914	Real estate clerks	1,150	1,090	1,021	1,133	-60	-69
112							
55108	Secretaries, except legal and medical	507	466	463	457	-41	-3
-6							
55302	Stenographers	2,083	1,997	1,853	1,919	-86	-143
65							
55305	Receptionists and information clerks	41,803	39,620	41,189	45,174	-2,183	1,569
3,985							

Table 33 (continued)

Oes code	OES Title	Ann. avg 1990	Ann. avg 1994	Ann. avg 1996	Proj. avg 1999	Total chg. 90-94	Total chg. 94-96	Proj. chg. 96-99
55307	Typists, including word processing	40,206	39,828	40,032	34,119	-378	204	-5,913
55314	Personnel clerks, except payroll and tim	5,061	4,512	4,385	5,244	-549	-127	859
55321	File clerks	11,755	10,922	11,189	11,692	-833	267	503
55323	Order clerks, materials, merchandise, an	16,299	15,412	17,451	15,858	-887	2,039	-1,593
55326	Procurement clerks	3,418	2,783	2,726	2,819	-635	-57	93
55328	Statistical clerks	2,177	1,881	1,819	1,807	-296	-62	-12
55332	Interviewing clerks, except personnel an	2,630	2,561	2,664	2,829	-69	103	165
55335	Customer service representatives, utilit	5,751	4,980	4,595	6,201	-771	-385	1,606
55338	Bookkeeping, accounting, and auditing cl	53,433	48,487	49,703	49,245	-4,945	1,216	-458
55341	Payroll and timekeeping clerks	7,544	6,856	7,032	6,825	-688	176	-207
55344	Billing, cost, and rate clerks	15,813	14,706	15,237	15,467	-1,107	531	230
55347	General office clerks	123,801	114,910	115,355	125,636	-8,891	445	10,281
56002	Billing, posting, and calculating machin	5,474	5,281	5,766	4,324	-193	485	-1,442
56005	Duplicating machine operators	1,549	1,492	1,567	1,731	-57	75	164
56008	Mail machine operators, preparation and	1,116	938	863	1,070	-178	-76	207
56014	Peripheral edp equipment operators	988	769	778	554	-219	9	-224
56017	Data entry keyers, except composing	18,975	17,040	17,410	17,979	-1,935	370	569
56021	Data keyers, composing	741	693	634	575	-48	-59	-59
56099	All other office machine operators	2,011	1,703	1,804	1,706	-309	101	-98

57102	Switchboard operators	9,390	8,747	9,399	7,610	-643	652	-1,789
57105	Directory assistance operators	2,778	2,208	1,985	1,880	-570	-223	-105
57111	Telegraph and teletype operators	253	227	217	199	-26	-10	-18
57302	Mail clerks, except mail machine operato	3,777	3,416	3,480	3,722	-361	64	242
57308	Postal service clerks	2,899	2,735	2,214	2,946	-164	-521	732
57311	Messengers	7,760	9,413	9,000	7,457	1,653	-413	-1,543
58002	Dispatchers, police, fire, and ambulance	713	727	719	796	15	-8	76
58005	Dispatchers, except police, fire, and am	4,654	4,494	4,518	4,707	-159	23	189
58008	Production, planning, and expediting cle	4,671	3,627	3,781	4,104	-1,043	153	323
58011	Transportation agents	411	378	373	422	-33	-6	49
58014	Meter readers, utilities	1,005	992	870	995	-13	-122	125
58017	Weighers, measurers, checkers, and sampl	722	645	656	723	-77	11	67
58021	Marking clerks	1,216	1,266	1,402	1,406	50	136	4

Table 33 (continued)

Oes code	OES Title	Ann. avg 1990	Ann. avg 1994	Ann. avg 1996	Proj. avg 1999	Total chg. 90-94	Total chg. 94-96	Proj. chg. 96-99
58023	Stock clerks, stockroom, warehouse, or s	3,589	3,036	3,120	3,150	-553	85	29
58026	Order fillers, wholesale and retail sale	9,049	7,908	8,117	8,747	-1,141	209	630
58028	Shipping, receiving, and traffic clerks	4,260	3,792	3,844	4,444	-468	51	600
58099	All other material recording, scheduling	5,106	4,142	3,920	5,064	-964	-222	1,144
59999	All other clerical and administrative su	24,566	22,167	19,725	23,274	-2,399	-2,442	3,549
63017	Correction officers and jailers	453	448	427	607	-5	-20	180
63021	Parking enforcement officers	355	350	347	383	-5	-3	36
63032	Sheriffs and deputy sheriffs	887	874	866	945	-13	-9	79
63035	Detectives and investigators, except pub	1,984	1,990	2,131	2,426	6	140	296
63044	Crossing guards	667	660	646	721	-7	-14	76
63047	Guards and watch guards	39,731	40,468	45,135	47,797	736	4,668	2,662
63099	All other protective service workers	973	962	977	1,068	-10	15	91
65005	Bartenders	9,541	8,745	8,949	8,232	-796	204	-717
65008	Waiters and waitresses	55,843	51,812	53,937	58,346	-4,031	2,125	4,409
65011	Food servers, outside	361	326	333	396	-36	7	62
65014	Dining room and cafeteria attendants and	9,379	8,869	9,091	9,607	-509	221	517
65017	Counter attendants, lunchroom, coffee sh	15,400	14,127	14,767	15,487	-1,273	640	720
65035	Cooks, short order	5,675	5,213	5,476	5,940	-462	263	464
65038	Food preparation workers	9,365	8,766	9,067	10,119	-599	302	1,052

65041	Combined food preparation and service wo	28,918	26,853	28,149	27,775	-2,065	1,296
-374							
65099	All other food service workers	9,505	9,233	9,160	10,716	-272	-73
1,556							
66099	All other health service workers	3,428	3,412	3,529	4,465	-16	117
936							
67002	Maids and housekeeping cleaners	8,945	8,049	8,217	8,849	-896	168
632							
68005	Hairdressers, hairstylists, and cosmetol	223	201	209	236	-22	9
26							
68008	Manicurists	738	669	707	818	-69	38
111							
68014	Amusement and recreation attendants	2,403	2,754	2,844	3,158	351	89
315							
68017	Guides	277	234	255	277	-44	21
22							
68021	Ushers, lobby attendants, and ticket tak	3,673	2,791	2,844	3,851	-882	53
1,007							
68035	Personal and home care aides	892	1,078	1,357	1,397	186	279
40							
68038	Child care workers	2,905	3,117	3,072	3,729	212	-45
656							
69999	All other service workers	9,555	8,911	8,847	11,050	-644	-64
2,204							
79011	Graders and sorters, agricultural produc	672	591	598	780	-81	7
183							
81008	First-line supv/mgr-production	543	427	433	478	-116	6
45							

Table 33 (continued)

Oes code	OES Title	Ann. avg 1990	Ann. avg 1994	Ann. avg 1996	Proj. avg 1999	Total chg. 90-94	Total chg. 94-96	Proj. chg. 96-99
81011	First-line supv/mgr-transportation	1,581	1,451	1,398	1,597	-130	-53	199
81017	First-line supv/mgr-help, laborers	451	365	378	450	-86	13	72
83002	Precision inspectors, testers, and grade	546	371	362	348	-175	-8	-15
83005	Production inspectors, testers, graders,	12,299	10,085	10,351	10,282	-2,214	266	-69
85956	Menders, garments, linens, and related	341	335	394	409	-6	59	15
85999	All other mechanics, installers, and rep	2,299	1,811	1,810	2,055	-488	-1	245
89514	Spotters, dry cleaning	288	262	292	290	-26	30	-2
89517	Pressers, delicate fabrics	1,443	1,413	1,617	1,491	-30	204	-126
91117	Machine tool cutting operators and tende	719	556	575	564	-163	19	-10
91905	Plastic molding and casting machine oper	4,632	3,882	3,866	4,073	-750	-16	207
91921	Electrolytic plating and coating machine	278	207	204	203	-71	-3	-1
92198	All other metal and plastic (cutting, fo	684	554	561	631	-130	7	70
92541	Typesetting and composing machine operat	457	392	346	378	-66	-46	32
92543	Printing press machine operators and ten	1,795	1,612	1,650	1,771	-184	38	121
92545	Photoengraving and lithographing machine	203	197	225	222	-6	28	-3
92546	Bindery machine operators and tenders	1,380	1,275	1,254	1,438	-105	-21	184
92549	All other printing, binding, and related	999	957	988	1,247	-42	31	260
92705	Textile machine operators and tenders, w	1,298	1,329	1,400	1,359	32	71	-41

92708	Extruding and forming machine operators	256	222	252	292	-34	30	40
92714	Textile bleaching and dyeing machine ope	261	286	299	304	25	13	5
92717	Sewing machine operators, garment	45,205	45,954	54,568	48,014	749	8,614	-6,554
92721	Sewing machine operators, nongarment	7,514	6,883	7,496	7,170	-631	613	-326
92723	Shoe sewing machine operators and tender	254	269	239	280	15	-30	41
92728	Pressing machine operators and tenders,	705	697	809	852	-8	112	43
92902	Electronic semiconductor processors	332	237	217	265	-95	-20	47
92908	Photographic processing machine operator	1,836	1,986	2,865	1,827	150	878	-1,038
92941	Cutting and slicing machine setters and	354	308	327	300	-45	19	-27
92944	Cutting and slicing machine operators an	618	535	566	536	-83	31	-31
92953	Coating, painting, and spraying machine	553	411	394	464	-142	-17	70
92956	Cementing and gluing machine operators a	455	358	363	363	-97	5	0
92958	Cleaning, washing, and pickling equipmen	285	238	238	287	-47	1	48

Table 33 (continued)

Oes code	OES Title	Ann. avg 1990	Ann. avg 1994	Ann. avg 1996	Proj. avg 1999	Total chg. 90-94	Total chg. 94-96	Proj. chg. 96-99
92965	Crushing, grinding, mixing, and blending	559	444	418	484	-115	-26	65
92971	Extruding, forming, pressing, and compac	1,301	1,059	1,064	1,273	-241	5	209
92974	Packaging and filling machine operators	5,863	5,604	5,928	5,214	-260	325	-714
92998	All other machine operators and tenders	2,105	1,990	2,277	1,876	-115	287	-401
93905	Electrical and electronic assemblers	10,097	6,824	6,753	7,934	-3,273	-71	1,181
93908	Coil winders, tapers, and finishers	574	400	363	466	-174	-37	103
93917	Solderers and brazers	347	254	274	280	-92	20	6
93921	Pressers, hand	1,590	1,406	1,607	1,573	-184	201	-34
93923	Sewers, hand	1,119	1,205	1,400	1,535	86	194	135
93926	Cutters and trimmers, hand	4,811	4,324	4,681	4,644	-486	356	-37
93935	Cannery workers	1,358	1,340	1,499	1,409	-18	159	-90
93944	Molders and casters, hand	374	319	288	309	-55	-32	21
93953	Grinding and polishing workers, hand	1,992	1,579	1,657	1,775	-412	78	118
93956	Assemblers and fabricators, except machi	33,295	25,938	26,070	27,715	-7,357	132	1,645
93999	All other hand workers	7,049	6,839	7,543	7,845	-210	704	302
95008	Chemical plant and system operators	414	363	337	416	-51	-26	79
95099	All other plant and system operators	354	333	320	353	-21	-13	34
97114	Taxi drivers and chauffeurs	1,453	1,408	1,502	1,665	-45	94	163
97199	All other motor vehicle operators	1,184	1,009	1,080	1,114	-175	71	34

97805	Service station attendants	1,741	1,544	1,656	1,421	-197	113
-236							
97808	Parking lot attendants	6,413	6,211	7,295	8,367	-202	1,084
1,072							
97951	Conveyor operators and tenders	376	318	318	378	-58	-0
60							
98502	Machine feeders and offbearers	1,354	1,172	1,210	1,310	-182	38
101							
98902	Hand packers and packagers	892	812	832	874	-80	20
43							
98905	Vehicle washers and equipment cleaners	1,294	1,143	1,212	1,417	-151	69
205							
98999	All other helpers, laborers, and materia	252	235	255	257	-17	20
2							
99999	All other OES categories	9,061	8,061	7,977	9,124	.	.
.							

Chapter 9 (continued)

Table 34

Estimated Annual-Average Job Openings Considered Appropriate for AFDC Recipients, Showing EDD Job Applicants and UI Claimants, with Projected Job Openings from Growth and Separations, and Wage Data from Job Openings and Survey Data, by OES Occupation Los Angeles County, 1996-97

OES code	OES title	Ann. new jobs	Ann. seps.	Tot. ann. open.	Job aps. 96-97	Elig. UI clmts.	Wage: Avg. first. quart.	Avg. med. wage
	Total, All OES Occupational Categories	22,091	37,160	59,252	108,342	67,594		
15011	Property and real estate managers and ad	159	334	493	158	122	.	.
15026	Food service and lodging managers	111	105	216	211	206	.	.
21111	Tax preparers	501	87	588	49	54	.	.
21199	All other financial specialists	99	38	138	15	19	10.24	17.15
21511	Personnel, training, and labor relations	141	42	183	77	72	15.34	20.83
21911	Compliance officers and enforcement insp	34	10	44	15	9	.	.
22599	All other engineering and related techni	45	51	96	25	33	14.09	18.47
24502	Biological, agricultural, and food techn	57	10	67	41	21	.	.
24599	All other physical and life science tech	53	11	64	8	8	14.32	17.65
27308	Human services workers	173	34	207	64	35	9.52	11.32
28308	Title searchers	74	10	84	10	34	.	.
31399	All other teachers and instructors	85	79	164	14	4	.	.
31505	Technical assistants, library	-62	61	-1	8	9	8.69	10.80
32518	Pharmacy technicians	72	.	72	177	148	10.08	11.48
32905	Medical and clinical laboratory technici	-22	43	21	86	76	11.02	13.82
32926	Electrocardiograph technicians	-32	7	-25	18	16	.	.
32999	All other health professionals, paraprof	38	7	45	4	3	11.00	15.12
34017	Announcers, radio and television	1	10	11	15	12	.	.
34023	Photographers	30	22	52	48	40	7.83	12.16
34056	Producers, directors, actors, and other	-690	327	-363	641	653	.	.
39999	All other professional, paraprofessional	208	42	250	13	19	.	.
41002	First-line supervisors and manager/super	13	10	23	5	3	10.90	18.20
43014	Sales agents, securities, commodities, a	14	20	35	18	15	.	.
43017	Sales agents, selected business services	-50	206	156	359	249	.	.

43021	Travel agents	228	230	458	127	132
9.69	11.37					
43023	Sales agents, advertising	12	14	25	9	6
.	.					
43099	All other sales representatives and sale	69	91	159	107	59
.	.					
49005	Sales representatives, scientific and re	12	82	94	34	30
15.58	23.65					
49008	Sales representatives, except scientific	977	1,651	2,628	533	536
11.24	18.70					
49011	Salespersons, retail	4,017	4,888	8,905	7,760	4,140
5.63	8.82					
49014	Salespersons, parts	162	176	338	50	47
7.70	11.97					
49017	Counter and rental clerks	257	302	559	101	53
5.49	7.67					
49023	Cashiers	1,990	1,305	3,295	11,600	5,409
5.33	7.54					
49014	Salespersons, parts	162	176	338	50	47
7.70	11.97					
49017	Counter and rental clerks	257	302	559	101	53
5.49	7.67					
49023	Cashiers	1,990	1,305	3,295	11,600	5,409
5.33	7.54					
49026	Telemarketers, door-to-door sales worker	45	270	315	957	479
6.28	9.37					
49032	Demonstrators, promoters, and models	-98	160	62	154	45
.	.					
49999	All other sales and related workers	162	375	537	3,001	2,098
8.10	13.67					
51002	First-line supervisors and manager/super	85	69	154	73	36
12.06	16.64					
53102	Tellers	758	193	951	708	694
.	.					
53108	Transit clerks	2	5	6	51	42
.	.					
53114	Credit authorizers	33	14	47	11	13
10.52	13.63					
53117	Credit checkers	129	30	159	18	10
7.73	12.04					
53121	Loan and credit clerks	515	139	654	214	375
11.00	13.78					
53123	Adjustment clerks	279	319	597	382	408
9.80	12.76					
53126	Statement clerks	-3	10	7	5	5
9.69	10.88					

Chapter 9 (continued)

Table 34 (continued)

OES code	OES title	Ann. new jobs	Ann. seps.	Tot. ann. open.	Job aps. 96-97	Elig. UI clmts.	Wage: Avg. first. quart.	Avg. med. wage
53128	Brokerage clerks	-10	40	30	22	23	11.25	13.33
53302	Insurance adjusters, examiners, and inve	80	10	91	21	24	14.22	19.15
53311	Insurance claims clerks	466	64	529	85	115	9.66	11.79
53314	Insurance policy processing clerks	243	94	337	18	25	.	.
53502	Welfare eligibility workers and intervie	30	13	43	4	8	.	.
53505	Investigators, clerical	1	7	8	1	2	.	.
53508	Bill and account collectors	359	214	573	396	466	10.17	12.39
53802	Travel clerks	16	9	25	58	50	.	.
53805	Reservation and transportation ticket ag	125	123	248	240	229	.	.
53808	Hotel desk clerks	185	151	337	214	193	5.89	7.33
53902	Library assistants and bookmobile driver	83	104	187	109	45	7.67	10.39
53908	Advertising clerks	54	18	72	12	10	.	.
53911	Proofreaders and copy markers	20	40	60	62	49	.	.
53914	Real estate clerks	37	34	71	12	25	.	.
55108	Secretaries, except legal and medical	-4	.	-4	28	11	9.66	12.59
55302	Stenographers	21	74	95	56	64	.	.
55305	Receptionists and information clerks	1,316	1,024	2,340	6,460	4,455	7.31	9.47
55307	Typists, including word processing	-1,971	981	-990	2,117	1,769	8.95	11.03
55314	Personnel clerks, except payroll and tim	286	94	380	232	242	9.45	12.59
55321	File clerks	168	203	370	1,526	583	5.57	7.63
55323	Order clerks, materials, merchandise, an	-530	387	-143	392	354	8.93	11.21
55326	Procurement clerks	31	67	98	81	101	10.12	12.52
55328	Statistical clerks	-4	47	43	246	221	10.03	12.50
55332	Interviewing clerks, except personnel an	55	84	139	320	242	5.90	8.19
55335	Customer service representatives, utilit	535	102	637	715	474	16.14	16.63
55338	Bookkeeping, accounting, and auditing cl	-146	1,919	1,773	2,423	2,806	10.00	12.93
55341	Payroll and timekeeping clerks	-69	184	115	216	265	9.99	13.25

55344	Billing, cost, and rate clerks	77	358	435	685	867
9.76	11.91					
55347	General office clerks	3,427	3,830	7,257	20,028	12,650
7.54	10.00					
56002	Billing, posting, and calculating machin	-481	87	-394	182	199
.	.					
56005	Duplicating machine operators	56	31	87	53	55
6.89	9.29					
56008	Mail machine operators, preparation and	58	29	87	13	12
.	.					
56014	Peripheral edp equipment operators	-75	20	-55	59	54
10.24	12.57					
56017	Data entry keyers, except composing	190	212	402	2,904	2,841
7.86	10.18					
56021	Data keyers, composing	-20	8	-12	3	4
8.57	11.29					
56099	All other office machine operators	-35	43	8	6	5
8.97	11.00					
57102	Switchboard operators	-596	270	-327	396	272
8.03	9.58					
57105	Directory assistance operators	-35	57	22	14	9
.	.					
57111	Telegraph and teletype operators	-6	5	-1	11	6
12.31	13.58					
57302	Mail clerks, except mail machine operato	79	97	177	524	428
7.98	12.00					
57308	Postal service clerks	244	72	316	527	221
.	.					
57311	Messengers	-514	272	-243	10,345	861
7.25	10.11					
58002	Dispatchers, police, fire, and ambulance	24	15	39	73	59
13.53	15.81					
58005	Dispatchers, except police, fire, and am	66	105	171	321	193
8.44	12.75					
58008	Production, planning, and expediting cle	110	88	197	153	135
9.10	13.02					
58011	Transportation agents	21	9	31	67	35
.	.					
58014	Meter readers, utilities	42	7	49	38	14
.	.					
58017	Weighers, measurers, checkers, and sampl	23	27	50	251	184
7.84	10.52					
58021	Marking clerks	1	52	53	37	34
.	.					
58023	Stock clerks, stockroom, warehouse, or s	10	78	88	401	314
6.53	10.04					
58026	Order fillers, wholesale and retail sale	210	200	410	79	69
7.12	9.69					
58028	Shipping, receiving, and traffic clerks	202	73	274	464	348
.	.					

Chapter 9 (continued)

Table 34 (continued)

OES code	OES title	Ann. new jobs	Ann. seps.	Tot. ann. open.	Job aps. 96-97	Elig. UI clmts.	Wage: first. quart.	Avg. med. wage
58099	All other material recording, scheduling	391	149	540	129	98	.	.
59999	All other clerical and administrative su	1,119	457	1,577	270	171	8.78	11.59
61099	All other supervisors and manager/superv	6	9	15	10	2	.	.
63017	Correction officers and jailers	61	6	67	11	8	.	.
63021	Parking enforcement officers	12	3	15	9			
63032	Sheriffs and deputy sheriffs	26	6	33	1	.	.	.
63035	Detectives and investigators, except pub	104	154	259	157	118	.	.
63044	Crossing guards	25	144	169	24	21	.	.
63047	Guards and watch guards	887	3,087	3,974	4,424	3,688	6.50	8.52
63099	All other protective service workers	40	7	47	12	10	7.59	11.98
65005	Bartenders	-239	284	45	455	436	5.22	6.75
65008	Waiters and waitresses	1,471	761	2,232	1,938	1,338	5.05	5.51
65011	Food servers, outside	17	2	19	14	12	.	.
65014	Dining room and cafeteria attendants and	233	167	401	413	154	5.09	5.80
65017	Counter attendants, lunchroom, coffee sh	240	128	368	472	179	.	.
65035	Cooks, short order	155	61	216	129	89	5.42	6.72
65038	Food preparation workers	415	295	710	620	317	5.32	6.65
65041	Combined food preparation and service wo	-125	608	483	3,706	733	5.07	5.75
65099	All other food service workers	519	241	760	89	43	5.45	7.93
66099	All other health service workers	312	198	510	201	171	10.05	11.44
67002	Maids and housekeeping cleaners	210	373	583	255	140	5.37	6.62
67099	All other cleaning and building service	-2	10	8	2	1	6.36	9.31
68005	Hairdressers, hairstylists, and cosmetol	9	6	16	6	.	5.70	8.53
68008	Manicurists	37	21	58	12	4	.	.
68014	Amusement and recreation attendants	157	125	282	542	86	.	.
68017	Guides	7	8	15	7	4	.	.
68021	Ushers, lobby attendants, and ticket tak	336	42	377	268	55	.	.
68032	Wardrobe, and locker and dressing room a	16	12	28	12	8	.	.

68035	Personal and home care aides	13	95	108	135	28
.	.					
68038	Child care workers	197	65	262	561	175
5.30	6.71					
69999	All other service workers	757	510	1,267	366	107
5.49	7.77					
79011	Graders and sorters, agricultural produc	60	23	83	28	37
6.53	8.37					
81008	First-line supv/mgr-production	12	11	23	33	23
13.11	18.83					
81011	First-line supv/mgr-transportatin	69	44	114	212	129
15.07	19.55					
83002	Precision inspectors, testers, and grade	-7	17	10	45	40
7.20	12.06					
83005	Production inspectors, testers, graders,	-23	319	296	1,096	954
5.55	9.42					
85956	Menders, garments, linens, and related	5	12	17	3	2
7.18	10.32					
85999	All other mechanics, installers, and rep	76	50	127	28	27
10.78	14.56					
89514	Spotters, dry cleaning	-1	13	12	2	2
.	.					
89517	Pressers, delicate fabrics	-42	72	30	4	5
.	.					
91117	Machine tool cutting operators and tende	-4	17	14	37	25
6.94	9.15					
91905	Plastic molding and casting machine oper	69	71	140	48	55
5.35	6.73					
91921	Electrolytic plating and coating machine	-0	3	2	4	3
.	.					
92198	All other metal and plastic (cutting, fo	24	9	33	37	24
6.77	9.17					
92529	All other printing related machine sette	9	5	14	8	6
.	.					
92541	Typesetting and composing machine operat	12	11	23	10	8
.	.					
92543	Printing press machine operators and ten	37	34	71	68	65
8.77	14.41					
92545	Photoengraving and lithographing machine	-1	7	6	14	9
.	.					
92546	Bindery machine operators and tenders	61	30	91	61	70
8.92	11.28					
92549	All other printing, binding, and related	77	21	98	2	3
.	.					
92705	Textile machine operators and tenders, w	-12	40	28	34	44
5.11	5.88					
92708	Extruding and forming machine operators	13	4	17	3	1
.	.					

Chapter 9 (continued)

Table 34 (continued)

OES code	OES title	Ann. new jobs	Ann. seps.	Tot. ann. open.	Job aps. 96-97	Elig. UI clmts.	Wage: Avg. first. quart.	Avg. med. wage
92714	Textile bleaching and dyeing machine ope	1	4	5	5	4	.	.
92717	Sewing machine operators, garment	-2,185	1,812	-373	1,244	2,171	5.14	5.94
92721	Sewing machine operators, nongarment	-109	250	141	736	728	5.16	6.43
92723	Shoe sewing machine operators and tender	14	5	18	10	6	.	.
92728	Pressing machine operators and tenders,	17	49	66	45	32	.	.
92902	Electronic semiconductor processors	15	4	19	16	12	.	.
92908	Photographic processing machine operator	-353	64	-288	80	75	.	.
92941	Cutting and slicing machine setters and	-6	4	-2	5	5	6.69	9.00
92944	Cutting and slicing machine operators an	-11	12	1	49	37	.	.
92953	Coating, painting, and spraying machine	22	5	27	12	8	5.56	8.17
92956	Cementing and gluing machine operators a	0	8	8	18	15	8.07	10.28
92958	Cleaning, washing, and pickling equipmen	19	10	29	5	3	.	.
92965	Crushing, grinding, mixing, and blending	20	6	26	25	20	7.41	9.93
92971	Extruding, forming, pressing, and compac	71	25	97	98	41	.	.
92974	Packaging and filling machine operators	-222	186	-37	145	35	.	.
92998	All other machine operators and tenders	-146	47	-99	132	104	6.08	8.41
93905	Electrical and electronic assemblers	394	122	516	1,335	1,256	6.44	9.74
93908	Coil winders, tapers, and finishers	34	8	42	4	4	.	.
93917	Solderers and brazers	2	5	7	16	11	6.79	8.20
93921	Pressers, hand	-11	34	23	62	81	5.17	5.90
93923	Sewers, hand	45	68	113	96	71	.	.
93926	Cutters and trimmers, hand	-12	101	89	166	140	5.13	6.15
93935	Cannery workers	-30	32	2	64	67	.	.
93944	Molders and casters, hand	7	8	15	32	29	.	.
93953	Grinding and polishing workers, hand	36	6	41	56	52	5.61	7.72
93956	Assemblers and fabricators, except machi	555	477	1,032	2,389	1,728	5.64	7.90
93999	All other hand workers	92	146	238	248	207	5.40	7.48

95008	Chemical plant and system operators	26	7	33	2	1	.	.
95099	All other plant and system operators	10	6	16	2	1	5.49	8.21
97105	Truck drivers, light, include delivery a	-3	5	2	18	8	.	.
97114	Taxi drivers and chauffeurs	55	51	106	515	334	.	.
97199	All other motor vehicle operators	11	24	36	6	4	7.30	9.11
97805	Service station attendants	-80	28	-52	70	63	5.60	7.32
97808	Parking lot attendants	357	414	772	366	270	5.20	6.10
97951	Conveyor operators and tenders	15	6	21	6	9	6.84	9.50
98502	Machine feeders and offbearers	23	12	35	57	41	5.62	8.02
98902	Hand packers and packagers	14	20	33	211	144	5.30	6.50
98905	Vehicle washers and equipment cleaners	56	14	71	39	26	5.19	6.29
98999	All other helpers, laborers, and materia	1	5	6	99	67	5.71	8.40
99999	All other OES categories	370	197	566	1,157	753	.	.

Chapter 9 (continued)

Table 35
Employment and Estimated Annual-Average Job Openings for AFDC Recipients by OES and DOT Occupations, Showing EDD Job Applicants and UI Claimants, with Job Openings from Growth and Separations, and Median Wages of EDD Job Openings, (Detail for DOT Categories with 1996 Employment of 100 or more), Los Angeles County, 1996-1997

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Tot. Ann. seps.	ann. open.	Med. wage
		TOTAL, ALL DOT CATEGOREIS	107,781	67,347	1,222,398	23,294	37,164	60,457	
00000	309.674-014	PERSONAL ATTENDANT	80	34	114	-5	.	-5	5.00
00000	309.677-010	COMPANION	268	128	418	-19	.	-19	5.06
15011	186.167-018	MANAGER, APARTMENT HOUSE	158	122	2,913	-63	344	281	5.76
15026	185.137-010	MANAGER, FAST FOOD SERVICES	211	206	2,800	47	106	153	6.25
21111	219.362-070	TAX PREPARER	49	54	2,799	-217	87	-129	6.00
21199	169.267-018	FINANCIAL-AID COUNSELOR	15	19	1,384	8	43	52	10.00
21511	166.267-026	RECRUITER	8	7	134	-1	3	2	10.00
21511	166.267-034	JOB DEVELOPMENT SPECIALIST	68	65	1,790	-11	41	30	9.12
21911	168.267-034	DRIVER'S LICENSE EXAMINER	9	2	122	4	5	9	.
22599	003.362-010	DESIGN TECHNICIAN, COMPUTER-AI	20	26	1,689	35	47	82	15.00
22599	194.382-014	TAPE TRANSFERRER	4	6	318	7	9	15	7.00
24502	559.384-010	LABORATORY ASSISTANT, CULTURE	30	17	229	9	7	16	8.00
24599	012.261-010	AIR ANALYST	4	6	328	-19	7	-12	10.00
24599	029.381-014	LABORATORY ASSISTANT	4	2	281	-16	6	-10	7.50
25111	609.262-010	TOOL PROGRAMMER, NUMERICAL CON	11	24	119	4	2	6	13.50
27308	195.367-010	CASE AIDE	34	21	712	9	20	29	4.25
27308	195.367-014	MANAGEMENT AIDE	24	13	322	4	9	13	.
28308	209.367-046	TITLE SEARCHER	10	34	551	-79	10	-68	10.00
31317	099.223-010	INSTRUCTOR, DRIVING	6	9	170	7	8	15	9.50
31399	099.227-010	CHILDREN'S TUTOR	14	4	1,347	-29	64	35	10.39
31505	100.367-018	LIBRARY TECHNICAL ASSISTANT	7	8	1,114	134	53	187	10.56
31505	100.387-010	CATALOG LIBRARIAN	1	1	197	24	9	33	14.87
32518	074.382-010	PHARMACY TECHNICIAN	177	148	2,020	47	.	47	8.00
32905	078.381-014	MEDICAL-LABORATORY TECHNICIAN	86	76	3,444	131	45	176	9.86
32926	078.362-018	ELECTROCARDIOGRAPH TECHNICIAN	18	16	553	15	7	22	7.77

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      32999 078.362-038 ELECTROMYOGRAPHIC TECHNICIAN          1       1       160       -2
  2        0 14.03
      32999 078.367-010 CARDIAC MONITOR TECHNICIAN            3       2       585       -7
  8        1  9.17
      34017 159.147-014 DISC JOCKEY                          15      12       463       23
  10      33  6.00
      34023 143.457-010 PHOTOGRAPHER                         48      40       685       -2
  23      21  5.50
      34056 159.647-010 AMUSEMENT PARK ENTERTAINER           10       7       107       13
  4       17  4.58
      34056 159.647-014 EXTRA                               535     568     9,510    1,161
  340   1,502  5.00
      34056 962.167-014 PROGRAM ASSISTANT                    87      71       908      111
  33     143  7.50
      39999 137.267-014 INTERPRETER, DEAF                     4       8       864      -22
  18      -3 10.32
      39999 199.267-018 EXAMINATION PROCTOR                   1       1       152       -4        3
-1  8.28
      39999 199.267-026 POLYGRAPH EXAMINER                    1       .       152       -4        3
-1   .
      39999 199.361-010 RADIOGRAPHER                          6      10     1,372      -34       29
-5  7.00
      39999 962.384-010 MICROPHONE-BOOM OPERATOR              1       .       203       -5        4
-1   .
      41002 299.137-014 SALES SUPERVISOR, MALT LIQUORS        4       3       177        3        7
10   .
      43014 250.357-026 SALES AGENT, FINANCIAL-REPORT        18      15       331       -8       16
8  6.92
      43017 250.357-022 SALES REPRESENTATIVE                 20      13       373       15       12
27  9.10
      43017 251.357-010 SALES AGENT, BUSINESS SERVICES      306     221     5,570      226      179
406  5.76
      43017 254.357-018 SALES REPRESENTATIVE, PRINTING        6       5       154        6        5
11  6.50
      43017 259.257-018 SERVICE REPRESENTATIVE, ELEVAT       13       1       316       13       10
23   .
      43021 252.152-010 TRAVEL AGENT                        127     132     5,365      -13      230
217  7.00
      43023 269.357-018 SALES-PROMOTION REPRESENTATIVE        9       6       363        6       12
18  6.00
      43099 259.157-010 SALES REPRESENTATIVE, AUDIOVIS       13       5       192       -2        8
6  7.25
      43099 259.257-010 SALES REPRESENTATIVE, EDUCATIO       10       6       192       -2        8
6  8.57
      43099 259.357-010 GROUP-SALES REPRESENTATIVE           35      10       449       -6       19
14  6.50
      43099 259.357-022 SALES REPRESENTATIVE, TELEVISI        9       5       150       -2        6
5  4.75
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Chapter 9 (continued)

Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. ann. open.	Med. wage
43099	273.357-014	SALES REPRESENTATIVE, AUTOMOTI	26	15	535	-7	23	16	5.50
43099	293.357-014	FUND RAISER II	7	8	160	-2	7	5	4.75
49005	262.357-010	SALES REPRESENTATIVE, CHEMICAL	23	17	1,232	30	49	79	8.65
49005	274.357-038	SALES REPRESENTATIVE, INDUSTRI	6	10	396	10	16	25	7.50
49008	260.357-014	SALES REPRESENTATIVE, FOOD PRO	60	67	4,139	51	166	216	8.07
49008	260.357-018	SALES REPRESENTATIVE, MALT LIQ	7	8	485	6	19	25	6.92
49008	260.357-022	SALES REPRESENTATIVE, TOBACCO	3	4	204	3	8	11	9.71
49008	261.357-010	SALES REPRESENTATIVE, APPAREL	16	8	792	10	32	41	5.00
49008	261.357-026	SALES REPRESENTATIVE, SAFETY A	2	1	153	2	6	8	5.00
49008	261.357-038	SALES REPRESENTATIVE, WOMEN'S	41	23	2,785	34	111	146	5.50
49008	273.357-022	SALES REPRESENTATIVE, MOTOR VE	11	9	843	10	34	44	8.00
49008	274.357-014	SALES REPRESENTATIVE, BOTTLES	5	5	281	3	11	15	7.00
49008	274.357-034	SALES REPRESENTATIVE, HARDWARE	30	29	2,146	26	86	112	6.75
49008	274.357-062	SALES REPRESENTATIVE, PRINTING	3	1	204	3	8	11	6.00
49008	275.357-010	SALES REPRESENTATIVE, BARBER A	11	5	511	6	20	27	5.25
49008	275.357-018	SALES REPRESENTATIVE, COMMERCI	7	9	664	8	27	35	6.50
49008	275.357-046	SALES REPRESENTATIVE, SHOE LEA	4	.	307	4	12	16	5.00
49008	275.357-050	SALES REPRESENTATIVE, VENDING	1	1	115	1	5	6	15.62
49008	277.357-010	SALES REPRESENTATIVE, HOBBIES	3	1	153	2	6	8	5.00
49008	277.357-022	SALES REPRESENTATIVE, PUBLICAT	1	1	179	2	7	9	5.46
49008	277.357-026	SALES REPRESENTATIVE, RECREATI	12	7	690	8	28	36	5.50
49008	277.357-030	SALES REPRESENTATIVE, WRITING	2	2	102	1	4	5	7.00
49008	279.357-014	SALES REPRESENTATIVE, GENERAL	297	337	25,598	315	1,024	1,339	5.50
49008	279.357-026	SALES REPRESENTATIVE, PAPER AN	3	5	204	3	8	11	6.00
49008	279.357-030	SALES REPRESENTATIVE, PLASTIC	3	4	230	3	9	12	10.57
49008	279.357-034	SALES REPRESENTATIVE, WATER-SO	4	2	230	3	9	12	5.00
49011	261.357-046	SALESPERSON, INFANTS' AND CHIL	9	7	150	3	7	10	5.00
49011	261.357-050	SALESPERSON, MEN'S AND BOYS' C	64	43	1,173	24	51	75	5.50
49011	261.357-054	SALESPERSON, MEN'S FURNISHINGS	11	9	160	3	7	10	5.50

49011	261.357-066	SALESPERSON, WOMEN'S APPAREL A	117	81	2,007	41	87	129	5.25
49011	262.357-018	SALESPERSON, COSMETICS AND TOI	50	49	729	15	32	47	5.50
49011	270.357-010	SALES REPRESENTATIVE, HOME FUR	28	22	320	7	14	20	5.00
49011	270.357-026	SALESPERSON, FLOOR COVERINGS	11	12	145	3	6	9	6.00
49011	270.357-030	SALESPERSON, FURNITURE	17	41	459	9	20	29	5.25
49011	270.357-034	SALESPERSON, HOUSEHOLD APPLIAN	13	12	225	5	10	14	4.75
49011	277.357-034	SALESPERSON, BOOKS	16	12	250	5	11	16	5.50
49011	277.357-042	SALESPERSON, PETS AND PET SUPP	6	2	105	2	5	7	5.00
49011	277.357-046	SALESPERSON, PHONOGRAPH RECORD	12	7	135	3	6	9	4.75
49011	277.357-050	SALESPERSON, PHOTOGRAPHIC SUPP	5	9	110	2	5	7	5.00
49011	277.357-058	SALESPERSON, SPORTING GOODS	13	8	195	4	8	12	5.00
49011	277.457-010	SALESPERSON, ART OBJECTS	11	6	115	2	5	7	5.76
49011	279.357-050	SALESPERSON, GENERAL HARDWARE	84	79	1,358	28	59	87	6.00
49011	279.357-054	SALESPERSON, GENERAL MERCHANDI	1,848	1,108	30,560	629	1,329	1,958	5.25
49011	279.357-058	SALESPERSON, JEWELRY	28	26	514	11	22	33	5.25
49011	290.477-010	COUPON-REDEMPTION CLERK	9	1	125	3	5	8	5.00
49011	290.477-014	SALES CLERK	2,615	1,155	34,180	703	1,487	2,190	5.00
49011	290.477-018	SALES CLERK, FOOD	157	78	2,047	42	89	131	5.55
49011	299.677-010	SALES ATTENDANT	2,591	1,339	36,342	748	1,581	2,329	5.00
49014	279.357-062	SALESPERSON, PARTS	50	47	8,052	170	176	346	6.00
49017	249.362-010	COUNTER CLERK	24	5	1,043	39	45	84	10.00
49017	249.366-010	COUNTER CLERK	8	2	434	16	19	35	6.00
49017	295.357-018	FURNITURE-RENTAL CONSULTANT	2	.	130	5	6	10	6.25
49017	295.367-014	BABY-STROLLER AND WHEELCHAIR R	6	3	348	13	15	28	5.00
49017	295.367-026	STORAGE-FACILITY RENTAL CLERK	7	7	608	23	26	49	6.00
49017	295.467-026	AUTOMOBILE RENTAL CLERK	19	15	1,738	65	75	139	6.50
49017	369.467-010	MANAGER, BRANCH STORE	8	10	376	14	16	30	.

Chapter 9 (continued)

Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. open.	Med. wage
49017	369.477-014	SERVICE-ESTABLISHMENT ATTENDAN	24	10	2,085	78	89	167	5.00
49023	211.362-010	CASHIER I	4,459	1,988	26,217	638	503	1,141	5.25
49023	211.462-010	CASHIER II	1,947	1,005	11,675	284	224	508	5.00
49023	211.462-014	CASHIER-CHECKER	4,172	2,047	24,613	599	473	1,071	5.25
49023	211.462-018	CASHIER-WRAPPER	345	152	1,884	46	36	82	5.00
49023	211.462-026	CHECK CASHIER	95	38	369	9	7	16	5.50
49023	211.467-010	CASHIER, COURTESY BOOTH	481	133	2,818	69	54	123	5.00
49023	211.467-030	TICKET SELLER	43	13	190	5	4	8	5.00
49026	291.357-010	SALES REPRESENTATIVE, DOOR-TO-	28	13	216	1	8	9	13.07
49026	299.357-014	TELEPHONE SOLICITOR	917	460	6,644	19	256	275	6.00
49032	279.357-010	SALES EXHIBITOR	13	5	218	21	15	37	7.50
49032	297.354-010	DEMONSTRATOR	127	37	1,862	181	131	312	6.25
49999	296.357-010	PERSONAL SHOPPER	59	15	301	2	8	11	10.00
49999	299.367-010	CUSTOMER-SERVICE CLERK	2,862	2,056	13,188	106	355	460	6.00
49999	299.667-014	STOCK CHECKER, APPAREL	57	16	238	2	6	8	5.00
51002	222.137-050	VAULT CASHIER	5	3	189	3	5	8	8.00
51002	235.132-014	COMMUNICATION-CENTER COORDINAT	3	3	103	2	3	4	.
51002	238.137-010	MANAGER, RESERVATIONS	2	1	103	2	3	4	8.25
51002	239.132-010	SUPERVISOR, TELEPHONE CLERKS	4	2	155	3	4	7	9.19
51002	249.137-026	SUPERVISOR, ORDER TAKERS	58	26	1,221	21	32	53	8.75
53102	211.362-018	TELLER	704	691	19,388	-413	194	-220	7.45
53108	217.382-010	PROOF-MACHINE OPERATOR	51	42	202	-8	5	-3	6.75
53114	249.367-022	CREDIT AUTHORIZER	11	13	566	1	14	14	6.50
53117	209.362-018	CREDIT REFERENCE CLERK	10	7	746	-23	15	-8	6.75
53117	237.367-014	CALL-OUT OPERATOR	2	.	178	-5	4	-2	.
53117	241.367-026	SKIP TRACER	5	3	426	-13	9	-4	8.00
53117	241.367-030	THROW-OUT CLERK	1	.	107	-3	2	-1	.
53121	205.367-022	CREDIT CLERK	89	128	2,122	-161	52	-109	8.00
53121	219.362-038	MORTGAGE-CLOSING CLERK	25	43	586	-45	14	-30	10.96

53121	249.362-014	MORTGAGE CLERK	36	73	1,091	-83	27	-56	10.36	
53121	249.362-018	MORTGAGE LOAN CLOSER	14	23	326	-25	8	-17	6.00	
53121	249.362-022	MORTGAGE LOAN PROCESSOR	50	108	1,558	-119	38	-80	10.52	
53123	241.367-014	CUSTOMER-COMPLAINT CLERK	381	403	15,504	923	319	1,242	8.00	
53123	241.387-010	CLAIMS CLERK	1	5	103	6	2	8	12.01	
53126	214.362-046	STATEMENT CLERK	5	5	411	-13	10	-3	8.00	
53128	216.482-034	DIVIDEND CLERK	3	4	300	-6	8	1	8.50	
53128	219.362-018	BROKERAGE CLERK II	4	6	225	-5	6	1	6.50	
53128	219.362-054	SECURITIES CLERK	3	2	200	-4	5	1	11.72	
53128	219.482-010	BROKERAGE CLERK I	12	11	825	-17	21	4	8.25	
53302	241.267-030	INVESTIGATOR	21	24	637	-36	12	-24	7.25	
53308	219.367-014	INSURANCE CLERK	18	27	181	-17	3	-13	7.00	
53311	205.367-018	CLAIMS CLERK II	21	26	826	-26	16	-10	8.00	
53311	241.362-010	CLAIMS CLERK I	64	89	2,672	-84	50	-34	10.00	
53314	203.382-014	CANCELLATION CLERK	4	3	461	-25	11	-13	8.98	
53314	209.687-018	REVIEWER	1	6	768	-41	19	-22	8.69	
53314	219.362-042	POLICY-CHANGE CLERK	7	9	1,076	-57	26	-31	10.50	
53314	219.482-014	INSURANCE CHECKER	6	7	1,537	-82	38	-44	8.50	
53502	168.267-038	ELIGIBILITY-AND-OCCUPANCY INTE	1	3	251	7	5	12	8.15	
53502	205.367-046	REHABILITATION CLERK	3	5	668	18	14	31	8.79	
53505	241.367-038	INVESTIGATOR, DEALER ACCOUNTS	1	2	327	-9	7	-2	10.00	
53508	241.357-010	COLLECTION CLERK	69	90	1,618	20	43	63	9.00	
53508	241.367-010	COLLECTOR	327	376	6,369	79	171	249	9.00	
53708	205.367-034	LICENSE CLERK	4	3	193	-16	5	-11	6.31	
53802	238.362-014	RESERVATION CLERK	33	34	390	4	7	11	5.50	
53802	238.367-030	TRAVEL CLERK	23	13	129	1	2	4	7.76	
53805	238.367-014	RESERVATION CLERK	50	53	1,983	33	36	69	11.31	

Chapter 9 (continued)

Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. ann. open.	Med. wage
53805	238.367-018	RESERVATIONS AGENT	158	145	4,057	67	74	141	6.65
53805	238.367-026	TICKET AGENT	26	25	527	9	10	18	6.25
53805	248.382-010	TICKETING CLERK	5	6	176	3	3	6	5.07
53808	238.367-038	HOTEL CLERK	214	193	2,569	33	151	184	6.00
53902	249.365-010	REGISTRATION CLERK	18	5	360	7	11	18	.
53902	249.367-046	LIBRARY ASSISTANT	88	39	3,010	62	89	151	4.25
53902	249.687-014	PAGE	3	1	152	3	4	8	6.89
53908	247.367-010	CLASSIFIED-AD CLERK I	3	2	158	-6	4	-2	5.00
53908	247.387-010	ADVERTISING CLERK	8	8	440	-17	12	-5	7.37
53911	209.387-030	PROOFREADER	21	30	418	-14	19	5	6.00
53911	209.687-010	CHECKER II	40	19	437	-15	20	5	6.75
53914	219.362-046	REAL-ESTATE CLERK	12	25	1,021	-35	34	-1	7.00
55108	201.362-022	SCHOOL SECRETARY	24	9	376	0	.	0	9.14
55302	202.362-014	STENOGRAPHER	6	5	146	-6	6	0	10.00
55302	203.582-058	TRANSCRIBING-MACHINE OPERATOR	50	59	1,681	-63	68	5	9.00
55305	237.367-010	APPOINTMENT CLERK	218	92	824	16	21	37	6.00
55305	237.367-022	INFORMATION CLERK	29	12	103	2	3	5	7.00
55305	237.367-038	RECEPTIONIST	5,946	4,313	39,509	761	992	1,753	6.85
55305	249.367-082	PARK AIDE	211	11	557	11	14	25	7.10
55307	203.362-010	CLERK-TYPIST	1,543	1,016	26,658	167	653	820	6.00
55307	203.382-030	WORD PROCESSING MACHINE OPERAT	484	689	12,089	76	296	372	9.76
55307	203.582-066	TYPIST	88	64	1,519	10	37	47	6.92
55314	205.362-010	CIVIL-SERVICE CLERK	12	9	184	1	4	5	4.75
55314	205.362-014	EMPLOYMENT CLERK	29	19	531	3	11	14	8.00
55314	205.362-022	IDENTIFICATION CLERK	7	3	140	1	3	4	5.00
55314	205.567-010	BENEFITS CLERK II	11	20	302	2	6	8	9.62
55314	209.362-026	PERSONNEL CLERK	161	180	3,207	17	69	86	9.00
55321	206.367-014	FILE CLERK II	389	137	2,071	25	37	62	6.00
55321	206.387-034	FILE CLERK I	1,091	426	8,928	107	162	269	7.00

55323	249.362-026	ORDER CLERK	386	349	17,254	1,008	383	1,391	7.50	
55323	295.367-018	FILM-RENTAL CLERK	6	5	197	12	4	16	5.50	
55326	249.367-066	PROCUREMENT CLERK	80	100	2,831	47	70	117	9.00	
55328	216.382-062	STATISTICAL CLERK	11	13	106	-2	3	1	7.00	
55328	245.362-010	MEDICAL-RECORD CLERK	229	202	1,669	-27	43	15	8.00	
55332	205.362-018	HOSPITAL-ADMITTING CLERK	264	201	2,150	42	68	110	9.00	
55332	205.367-054	SURVEY WORKER	49	32	430	8	14	22	6.24	
55335	239.362-014	CUSTOMER SERVICE REPRESENTATIV	699	463	4,492	-188	100	-88	8.00	
55335	239.367-034	UTILITY CLERK	16	11	103	-4	2	-2	5.75	
55338	210.382-046	GENERAL-LEDGER BOOKKEEPER	20	17	237	3	10	13	10.01	
55338	210.382-054	NIGHT AUDITOR	13	16	323	5	13	18	6.00	
55338	216.362-014	COLLECTION CLERK	59	67	1,029	14	42	56	10.00	
55338	216.382-022	BUDGET CLERK	6	8	112	2	5	6	11.02	
55338	216.482-010	ACCOUNTING CLERK	2,301	2,681	47,674	668	1,926	2,594	9.00	
55341	215.362-022	TIMEKEEPER	8	5	161	2	4	7	6.50	
55341	215.382-014	PAYROLL CLERK	207	259	6,877	105	179	285	9.00	
55344	214.362-014	DOCUMENTATION-BILLING CLERK	7	10	154	3	4	6	8.50	
55344	214.362-022	INSURANCE CLERK	109	126	2,360	42	55	97	9.00	
55344	214.362-026	INVOICE-CONTROL CLERK	203	266	4,427	78	104	182	8.57	
55344	214.362-038	TRAFFIC-RATE CLERK	7	11	147	3	3	6	8.00	
55344	214.362-042	BILLING CLERK	231	308	5,257	93	124	216	8.00	
55344	214.382-014	BILLING TYPIST	29	38	647	11	15	27	10.57	
55344	214.467-010	FOREIGN CLERK	44	48	971	17	23	40	14.42	
55344	214.482-018	MEDICAL-VOUCHER CLERK	28	35	662	12	16	27	8.00	
55344	214.482-022	RATER	3	7	110	2	3	5	10.00	
55344	216.382-034	COST CLERK	10	11	199	4	5	8	10.00	
55344	216.382-054	RECEIPT-AND-REPORT CLERK	6	1	132	2	3	5	.	

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Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. open.	Med. ann. wage
55347	209.562-010	CLERK, GENERAL	18,522	11,246	108,668	502	3,608	4,110	6.00
55347	219.362-010	ADMINISTRATIVE CLERK	1,424	1,364	6,825	32	227	258	9.61
55347	245.362-014	UNIT CLERK	38	21	121	1	4	5	10.24
56002	211.482-014	FOOD CHECKER	19	7	352	15	5	20	5.85
56002	211.482-018	FOOD-AND-BEVERAGE CHECKER	16	12	572	24	9	33	4.25
56002	214.462-010	ACCOUNTS-ADJUSTABLE CLERK	99	134	3,661	154	55	209	8.00
56002	214.482-010	BILLING-MACHINE OPERATOR	45	45	1,066	45	16	61	10.00
56005	207.682-010	DUPLICATING-MACHINE OPERATOR I	9	6	257	7	5	12	8.00
56005	207.682-014	DUPLICATING-MACHINE OPERATOR I	10	13	289	8	6	13	7.00
56005	207.685-014	PHOTOCOPYING-MACHINE OPERATOR	32	32	932	24	18	43	6.00
56008	208.685-014	FOLDING-MACHINE OPERATOR	3	3	140	-6	6	0	5.00
56008	208.685-018	INSERTING-MACHINE OPERATOR	6	8	488	-19	20	0	5.00
56008	208.685-026	SEALING-AND-CANCELING-MACHINE	3	1	116	-5	5	0	5.00
56014	213.382-010	COMPUTER PERIPHERAL EQUIPMENT	59	54	778	5	20	24	9.00
56017	203.582-054	DATA ENTRY CLERK	2,902	2,839	17,405	215	212	427	8.00
56021	203.582-062	TYPESETTER-PERFORATOR OPERATOR	1	3	288	-13	4	-10	7.25
56021	208.382-010	TERMINAL-MAKEUP OPERATOR	2	1	346	-16	4	-12	.
56099	208.685-010	COLLATOR OPERATOR	2	1	722	21	16	37	6.50
56099	208.685-022	MICROFILM MOUNTER	1	1	361	10	8	18	.
56099	217.485-010	CURRENCY COUNTER	3	3	722	21	16	37	8.00
57102	235.662-014	COMMUNICATION-CENTER OPERATOR	13	3	168	6	5	11	7.53
57102	235.662-022	TELEPHONE OPERATOR	322	238	8,010	285	230	515	7.00
57102	235.662-026	TELEPHONE-ANSWERING-SERVICE OP	14	14	295	11	8	19	6.00
57102	239.362-010	TELEPHONE CLERK, TELEGRAPH OFF	45	17	894	32	26	57	6.00
57105	235.662-018	DIRECTORY-ASSISTANCE OPERATOR	14	9	1,985	-112	57	-55	7.03
57302	209.687-026	MAIL CLERK	513	424	3,574	110	101	211	7.00
57311	230.663-010	DELIVERER, OUTSIDE	289	229	215	-5	7	2	6.00
57311	239.567-010	OFFICE HELPER	10,056	632	8,698	-190	263	72	5.47
58002	379.362-010	DISPATCHER, RADIO	23	23	249	-1	6	4	7.50

58002	379.362-018	TELECOMMUNICATOR	50	36	471	-3	10	8	8.00
58005	221.367-070	SERVICE CLERK	118	30	1,008	3	22	26	7.00
58005	239.367-014	DISPATCHER, MAINTENANCE SERVIC	47	31	767	3	17	20	6.00
58005	239.367-022	RECEIVER-DISPATCHER	33	12	286	1	6	7	10.00
58005	249.167-014	DISPATCHER, MOTOR VEHICLE	74	76	1,564	5	35	40	7.46
58005	913.167-010	BUS DISPATCHER, INTERSTATE	23	23	436	1	10	11	7.00
58005	913.367-010	TAXICAB STARTER	11	9	211	1	5	5	6.00
58005	959.167-010	DISPATCHER, SERVICE	11	9	165	1	4	4	7.00
58008	199.382-010	TELEVISION-SCHEDULE COORDINATO	11	13	261	6	6	12	14.42
58008	215.362-014	DISPATCHER CLERK	6	5	118	3	3	5	8.75
58008	215.367-010	ASSIGNMENT CLERK	7	2	183	4	4	8	.
58008	215.367-014	PERSONNEL SCHEDULER	6	13	218	5	5	10	8.31
58008	221.382-018	PRODUCTION CLERK	26	43	836	20	19	39	6.00
58008	221.387-034	JOB TRACER	14	5	366	9	8	17	.
58008	221.387-050	PRODUCTION ASSISTANT	13	16	340	8	8	16	6.00
58008	249.167-018	LABOR EXPEDITER	33	13	488	12	11	23	.
58011	912.367-014	TRANSPORTATION AGENT	67	35	373	-3	7	4	18.55
58014	209.567-010	METER READER	38	14	870	-61	7	-54	12.32
58017	222.387-074	SHIPPING-AND-RECEIVING WEIGHER	156	115	417	4	17	21	6.50
58017	299.587-010	PRODUCE WEIGHER	46	35	102	1	4	5	6.50
58021	209.587-034	MARKER	37	34	1,402	68	52	120	5.00
58023	219.367-018	MERCHANDISE DISTRIBUTOR	17	17	130	2	3	5	6.46
58023	219.387-030	STOCK CONTROL CLERK	223	196	1,806	30	45	75	7.00
58023	222.387-034	MATERIAL CLERK	36	25	233	4	6	10	7.50
58023	249.367-058	PARTS-ORDER-AND-STOCK CLERK	18	19	128	2	3	5	6.50
58023	381.687-010	CENTRAL-SUPPLY WORKER	51	30	508	9	13	21	6.00
58026	222.487-014	ORDER FILLER	79	69	8,117	105	200	305	6.00

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Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. open.	Med. wage
58028	219.367-030	SHIPPING-ORDER CLERK	108	96	777	27	15	41	6.00
58028	222.587-018	DISTRIBUTING CLERK	59	43	406	14	8	22	5.00
58028	222.687-030	SHIPPING CHECKER	210	161	1,514	52	28	81	5.00
58028	976.687-018	PHOTOFINISHING LABORATORY WORK	19	13	138	5	3	7	5.50
58099	209.667-014	ORDER CALLER	3	2	171	-4	6	2	7.00
58099	221.362-010	AIRCRAFT-LOG CLERK	7	6	205	-5	8	3	10.96
58099	221.387-038	LAUNDRY CLERK	3	4	182	-4	7	2	5.50
58099	222.587-026	LABORATORY CLERK	4	5	136	-3	5	2	8.00
58099	222.587-038	ROUTER	26	20	648	-15	24	9	7.00
58099	222.687-014	GARMENT SORTER	13	22	546	-13	20	7	5.00
58099	229.587-018	TICKETER	52	26	1,376	-33	51	18	5.00
58099	249.587-018	DOCUMENT PREPARER, MICROFILMIN	10	10	205	-5	8	3	8.00
59999	209.362-010	CIRCULATION CLERK	24	13	1,584	-60	39	-21	4.25
59999	209.362-014	CONTROL CLERK, AUDITING	6	4	407	-15	10	-5	7.27
59999	209.367-034	LOST-CHARGE-CARD CLERK	2	2	136	-5	3	-2	.
59999	209.367-038	NEWS ASSISTANT	5	4	204	-8	5	-3	11.05
59999	209.387-022	DATA-EXAMINATION CLERK	18	19	1,177	-44	29	-16	8.33
59999	209.387-034	SUGGESTION CLERK	2	1	158	-6	4	-2	.
59999	209.582-010	MUSIC COPYIST	1	.	385	-15	9	-5	7.00
59999	209.587-010	ADDRESSER	55	1	6,969	-263	171	-92	4.25
59999	209.587-022	HISTORY-CARD CLERK	2	.	102	-4	2	-1	.
59999	209.587-042	RETURN-TO-FACTORY CLERK	1	4	136	-5	3	-2	6.00
59999	209.687-022	SORTER	22	17	1,380	-52	34	-18	5.50
59999	219.367-038	UNDERWRITING CLERK	10	20	928	-35	23	-12	10.00
59999	219.387-010	ASSIGNMENT CLERK	42	16	2,150	-81	53	-28	7.00
59999	219.387-014	INSURANCE CLERK	18	29	1,358	-51	33	-18	8.00
59999	219.462-014	TRAIN CLERK	2	1	136	-5	3	-2	.
59999	222.367-054	PROPERTY CLERK	2	2	204	-8	5	-3	.
59999	241.367-042	PROPERTY-ASSESSMENT MONITOR	2	4	113	-4	3	-1	.

59999	245.587-010	DIET CLERK	16	8	837	-32	21	-11	6.94		
59999	247.382-010	MEDIA CLERK	5	1	226	-9	6	-3	4.50		
59999	249.367-026	CREDIT CARD CONTROL CLERK	2	2	136	-5	3	-2	9.23		
59999	249.367-062	PROCESS SERVER	10	7	498	-19	12	-7	6.00		
59999	249.367-078	TEST TECHNICIAN	4	5	226	-9	6	-3	8.00		
59999	249.387-010	BROADCAST CHECKER	3	1	113	-4	3	-1	13.46		
59999	249.387-022	READER	4	1	158	-6	4	-2	5.00		
61099	344.137-010	USHER, HEAD	10	2	138	2	5	7	4.62		
63017	372.677-010	PATROL CONDUCTOR	3	4	199	1	3	4	8.55		
63017	375.367-010	POLICE OFFICER II	6	4	185	1	3	3	6.00		
63021	375.587-010	PARKING ENFORCEMENT OFFICER	9	6	347	-2	3	1	13.06		
63032	377.667-018	DEPUTY SHERIFF, CIVIL DIVISION	1	.	866	-4	6	2	.		
63035	376.267-018	INVESTIGATOR, PRIVATE	24	29	576	19	39	58	8.00		
63035	376.267-022	SHOPPING INVESTIGATOR	13	13	201	7	14	20	15.00		
63035	376.367-010	ALARM INVESTIGATOR	24	16	229	8	16	23	6.85		
63035	376.367-014	DETECTIVE I	12	15	246	8	17	25	8.00		
63035	376.367-018	HOUSE OFFICER	76	38	705	23	48	71	7.00		
63035	376.367-026	UNDERCOVER OPERATOR	7	7	157	5	11	16	8.00		
63038	376.667-018	PATROLLER	1	1	108	-2	7	5	8.25		
63044	371.567-010	GUARD, SCHOOL-CROSSING	20	17	544	-6	121	115	9.65		
63044	371.667-010	CROSSING TENDER	4	4	102	-1	23	22	5.53		
63047	372.667-010	AIRLINE SECURITY REPRESENTATIV	21	12	191	10	13	23	5.15		
63047	372.667-014	BODYGUARD	13	12	112	6	8	13	10.48		
63047	372.667-030	GATE GUARD	64	59	709	37	48	85	5.87		
63047	372.667-034	GUARD, SECURITY	4,264	3,559	43,403	2,255	2,969	5,224	5.75		
63047	372.667-038	MERCHANT PATROLLER	52	42	653	34	45	79	5.45		
63099	372.667-042	SCHOOL BUS MONITOR	6	3	340	3	2	5	7.00		

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Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. open.	Med. wage
63099	379.263-010	ANIMAL TREATMENT INVESTIGATOR	5	7	510	4	3	7	9.00
63099	379.367-010	SURVEILLANCE-SYSTEM MONITOR	1	.	127	1	1	2	6.75
65005	312.474-010	BARTENDER	444	429	8,735	100	277	376	5.00
65005	312.477-010	BAR ATTENDANT	10	7	194	2	6	8	5.00
65008	311.477-018	WAITER/WAITRESS, BAR	45	34	1,355	27	19	46	4.25
65008	311.477-026	WAITER/WAITRESS, FORMAL	232	243	8,271	163	117	280	4.25
65008	311.477-030	WAITER/WAITRESS, INFORMAL	1,615	1,020	42,877	845	605	1,449	4.25
65008	311.674-018	WAITER/WAITRESS, BUFFET	41	36	1,207	24	17	41	4.75
65008	352.677-018	WAITER/WAITRESS, CLUB	5	5	227	4	3	8	4.25
65011	311.477-034	WAITER/WAITRESS, ROOM SERVICE	7	9	247	3	2	5	4.25
65014	311.677-010	CAFETERIA ATTENDANT	413	154	9,091	111	124	234	4.75
65017	311.477-014	COUNTER ATTENDANT, LUNCHROOM O	159	59	5,016	109	44	152	5.00
65017	311.477-038	WAITER/WAITRESS, TAKE OUT	6	4	244	5	2	7	5.00
65017	311.677-014	COUNTER ATTENDANT, CAFETERIA	300	113	9,225	200	80	280	5.00
65017	319.474-010	FOUNTAIN SERVER	6	3	244	5	2	7	4.75
65035	313.374-014	COOK, SHORT ORDER	129	89	5,476	132	61	193	5.50
65038	316.684-014	DELI CUTTER-SLICER	24	18	308	5	8	14	6.22
65038	317.384-010	SALAD MAKER	25	26	376	6	10	17	5.00
65038	317.684-014	PANTRY GOODS MAKER	28	22	611	10	17	27	6.46
65038	319.484-010	FOOD ASSEMBLER, KITCHEN	537	250	7,661	127	211	338	5.00
65041	311.472-010	FAST-FOODS WORKER	3,706	733	28,380	764	613	1,377	4.75
65099	319.467-010	FOOD ORDER EXPEDITER	48	27	4,659	-19	123	104	5.30
65099	319.677-010	CATERER HELPER	41	16	4,501	-18	118	100	5.50
66099	079.364-022	PHLEBOTOMIST	201	171	3,596	92	201	293	7.00
67002	323.687-014	CLEANER, HOUSEKEEPING	255	140	8,217	84	375	459	5.00
67099	389.687-010	AIR PURIFIER SERVICER	2	1	149	2	7	9	6.50
68005	339.371-014	SCALP-TREATMENT OPERATOR	4	.	105	2	3	5	.
68008	331.674-010	MANICURIST	12	4	707	19	21	40	5.00
68014	195.367-030	RECREATION AIDE	309	31	1,802	28	53	81	4.75

68014	341.367-010	RECREATION-FACILITY ATTENDANT	55	9	343	5	10	15	5.15
68014	342.657-014	GAME ATTENDANT	62	7	275	4	8	12	4.75
68014	342.677-010	RIDE ATTENDANT	46	4	104	2	3	5	5.00
68017	353.367-010	GUIDE	3	1	127	5	4	9	8.50
68021	344.667-010	TICKET TAKER	23	6	174	2	3	4	5.00
68021	344.677-014	USHER	112	27	1,112	10	16	27	5.25
68021	349.677-018	CHILDREN'S ATTENDANT	127	21	1,519	14	22	36	5.00
68032	346.374-010	COSTUMER ASSISTANT	8	5	134	1	7	9	5.00
68035	309.354-010	HOMEMAKER	123	23	1,241	131	87	218	6.50
68035	359.573-010	BLIND AIDE	12	5	126	13	9	22	5.17
68038	359.677-018	NURSERY SCHOOL ATTENDANT	491	173	2,582	-19	60	41	5.00
68038	359.677-026	PLAYROOM ATTENDANT	70	2	490	-4	11	8	4.25
69999	324.577-010	ROOM-SERVICE CLERK	124	40	2,042	-6	114	108	5.50
69999	352.377-010	HOST/HOSTESS, GROUND	8	2	155	-0	9	8	5.90
69999	352.667-010	HOST/HOSTESS	139	38	4,096	-12	229	218	5.00
69999	352.667-014	PARLOR CHAPERONE	4	1	143	-0	8	8	6.60
69999	352.677-014	RECEPTIONIST, AIRLINE LOUNGE	34	8	442	-1	25	23	6.76
69999	358.677-014	LOCKER-ROOM ATTENDANT	14	4	442	-1	25	23	5.50
69999	359.367-014	WEIGHT-REDUCTION SPECIALIST	12	5	310	-1	17	16	5.50
69999	359.667-010	CHAPERON	4	.	143	-0	8	8	6.50
69999	359.677-022	PASSENGER SERVICE REPRESENTATI	4	4	107	-0	6	6	5.00
69999	359.677-030	RESEARCH SUBJECT	12	3	657	-2	37	35	10.00
79011	529.687-186	SORTER, AGRICULTURAL PRODUCE	26	37	569	3	22	25	5.10
81008	559.134-010	QUALITY-CONTROL SUPERVISOR	9	12	123	1	4	5	8.25
81008	920.137-022	SUPERVISOR, FILLING-AND-PACKIN	9	2	114	1	4	5	13.46
81011	292.137-014	SUPERVISOR, ROUTE SALES-DELIVE	17	22	129	-2	4	2	9.20
81011	922.137-026	WAREHOUSE TRAFFIC SUPERVISOR	186	97	1,204	-20	36	16	6.31

Chapter 9 (continued)

Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. open.	Med. wage
81017	915.137-010	CAR-WASH SUPERVISOR	4	2	380	8	11	19	6.25
83002	559.381-010	INSPECTOR	29	24	225	-3	7	5	7.75
83005	369.687-010	ASSEMBLER	68	21	270	3	8	12	6.00
83005	369.687-022	INSPECTOR	13	13	107	1	3	5	5.95
83005	529.387-030	QUALITY-CONTROL TECHNICIAN	37	44	451	6	14	20	7.00
83005	579.687-030	SELECTOR	19	19	199	3	6	9	10.93
83005	609.684-010	INSPECTOR, GENERAL	50	53	522	7	16	23	5.75
83005	685.687-010	CLOTH INSPECTOR	19	9	146	2	4	6	.
83005	725.687-026	QUALITY-CONTROL INSPECTOR	19	31	302	4	9	13	8.00
83005	726.684-022	ELECTRONICS INSPECTOR	22	36	338	4	10	15	7.75
83005	726.684-026	ELECTRONICS TESTER	41	43	458	6	14	20	10.00
83005	727.687-062	INSPECTOR	9	8	107	1	3	5	8.95
83005	781.687-010	ASSEMBLER	37	47	498	6	15	22	4.50
83005	781.687-014	CLOTH EXAMINER, HAND	14	11	117	2	4	5	5.15
83005	789.387-010	QUALITY-CONTROL CHECKER	58	66	654	8	20	29	5.50
83005	789.587-014	INSPECTOR, FABRIC	24	24	231	3	7	10	5.00
83005	789.687-050	FINISHER	15	17	139	2	4	6	4.37
83005	789.687-070	GARMENT INSPECTOR	176	179	1,660	21	51	72	5.00
83005	806.367-018	QUALITY ASSURANCE MONITOR	30	42	345	4	11	15	11.00
83005	920.387-010	INSPECTOR, PACKAGING MATERIALS	77	16	288	4	9	13	6.75
85714	729.684-038	REPAIRER, SWITCHGEAR	9	7	104	6	3	9	11.18
85947	319.464-014	VENDING-MACHINE ATTENDANT	6	7	137	8	4	12	7.00
85956	782.684-038	MATCH-UP WORKER	2	1	263	20	8	27	4.25
85956	782.684-046	MENDER, KNIT GOODS	1	1	131	10	4	14	5.00
85999	639.281-010	AVIATION SUPPORT EQUIPMENT REP	10	10	656	1	19	20	11.00
85999	701.381-010	REPAIRER, HANDTOOLS	2	4	158	0	5	5	5.00
85999	701.384-010	TOOL-MAINTENANCE WORKER	2	1	136	0	4	4	.
85999	709.684-062	REPAIRER	4	4	181	0	5	6	7.00
85999	754.684-046	PLASTICS REPAIRER	3	3	204	0	6	6	5.00

89514	362.381-010	SPOTTER II	2	2	292	15	13	28	9.68
89517	363.681-010	SILK FINISHER	4	5	1,617	102	72	174	7.50
91117	603.685-050	DEBURRER	13	9	179	3	5	8	5.00
91711	726.684-094	SOLDER DEPOSIT OPERATOR	1	2	103	4	2	5	4.75
91905	556.685-022	COMPRESSION-MOLDING-MACHINE TE	8	18	996	-2	18	16	6.46
91905	556.685-038	INJECTION-MOLDING-MACHINE TEND	35	33	2,633	-5	48	43	4.85
91905	556.685-082	VACUUM PLASTIC-FORMING-MACHINE	4	3	166	-0	3	3	6.00
91921	500.684-034	PLATER	2	2	103	-0	1	1	6.47
92198	754.685-014	ASSEMBLY-MACHINE TENDER	5	4	122	1	2	3	5.00
92529	659.682-026	SIGN WRITER, MACHINE	8	6	174	10	4	14	6.00
92541	650.685-010	TYPESETTING-MACHINE TENDER	3	4	103	-7	3	-4	6.00
92541	652.585-010	PHOTOLETTERING-MACHINE OPERATO	3	1	110	-7	3	-4	8.00
92543	651.682-014	OFFSET-DUPLICATING-MACHINE OPE	11	17	317	4	7	11	8.00
92543	651.685-018	OFFSET-PRESS OPERATOR II	12	13	332	4	7	11	8.50
92543	652.682-030	STAMPING-PRESS OPERATOR	3	1	130	2	3	4	6.25
92543	652.685-062	PRINTER	5	6	144	2	3	5	6.00
92543	652.685-098	TICKETER	9	7	224	3	5	8	5.00
92543	979.685-010	SILK-SCREEN PRINTER, MACHINE	13	11	238	3	5	8	5.25
92545	979.682-014	BLUEPRINTING-MACHINE OPERATOR	8	6	152	9	5	14	6.00
92546	653.685-010	BINDERY WORKER	50	59	1,080	-7	26	19	5.50
92549	652.685-042	KEYING-MACHINE OPERATOR	1	1	329	5	8	13	8.00
92549	652.685-094	TICKET PRINTER AND TAGGER	1	2	659	10	16	26	4.50
92705	683.682-010	CARPET WEAVER	2	3	110	3	4	6	.
92705	685.682-010	CROCHET-MACHINE OPERATOR	3	3	110	3	4	6	.
92705	781.682-010	TRIMMER, MACHINE	12	22	501	13	16	29	4.25
92708	557.685-018	PROCESSOR	2	.	168	10	3	13	6.00
92714	582.362-014	DYE AUTOMATION OPERATOR	2	3	107	2	2	4	4.25

Chapter 9 (continued)

Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. open.	Med. wage
92717	786.682-046	BLINDSTITCH-MACHINE OPERATOR	15	23	551	44	18	62	5.00
92717	786.682-054	CHAINSTITCH SEWING MACHINE OPE	3	1	108	9	4	12	7.50
92717	786.682-078	COVERSTITCH-MACHINE OPERATOR	22	62	1,366	108	45	153	5.00
92717	786.682-094	ELASTIC ATTACHER, OVERLOCK	4	8	216	17	7	24	5.00
92717	786.682-126	HEMMER, BLINDSTITCH	2	8	156	12	5	17	4.62
92717	786.682-142	HEMSTITCHING-MACHINE OPERATOR	8	17	336	26	11	38	4.25
92717	786.682-170	LOCKSTITCH-MACHINE OPERATOR	551	983	24,513	1,935	814	2,749	5.00
92717	786.682-174	LOCKSTITCH-SEWING-MACHINE OPER	5	11	228	18	8	26	8.00
92717	786.682-178	MULTINEEDLE-CHAINSTITCH-MACHIN	11	27	479	38	16	54	5.00
92717	786.682-194	OVERLOCK SEWING MACHINE OPERAT	327	578	14,372	1,134	477	1,612	5.00
92717	786.682-198	OVERLOCK-MACHINE OPERATOR, COM	35	69	1,822	144	60	204	5.00
92717	786.682-278	ZIGZAG-MACHINE OPERATOR	8	23	467	37	16	52	5.00
92717	786.685-010	BUTTON-SEWING-MACHINE OPERATOR	7	12	288	23	10	32	4.87
92717	786.685-014	BUTTONHOLE-MACHINE OPERATOR	6	10	252	20	8	28	5.00
92717	786.685-018	EMBROIDERY-MACHINE OPERATOR	47	59	1,462	115	49	164	5.15
92717	786.685-030	SEWING-MACHINE OPERATOR, SEMIA	136	191	5,610	443	186	629	4.50
92717	786.685-034	TACKING-MACHINE OPERATOR	15	31	671	53	22	75	4.37
92717	786.685-042	BUTTONHOLE-AND-BUTTON-SEWING-M	11	20	503	40	17	56	4.25
92721	780.682-010	SEWING-MACHINE OPERATOR	71	59	529	22	18	39	6.00
92721	780.682-018	UPHOLSTERY SEWER	30	28	328	13	11	24	6.00
92721	783.682-014	SEWING MACHINE OPERATOR	26	21	229	9	8	17	5.00
92721	787.682-018	DRAPERY OPERATOR	11	15	155	6	5	11	6.00
92721	787.682-046	SEWING-MACHINE OPERATOR	493	507	5,334	218	177	395	5.00
92721	787.682-058	SEWING-MACHINE OPERATOR II	14	21	173	7	6	13	5.00
92721	787.682-066	SEWING MACHINE OPERATOR I	34	26	289	12	10	21	4.75
92723	690.682-082	STITCHER, STANDARD MACHINE	10	6	239	-15	5	10	5.00
92728	363.685-010	PRESS OPERATOR	12	7	134	9	7	16	5.50
92728	363.685-014	PRESSER, AUTOMATIC	14	10	246	17	12	29	5.50
92728	363.685-018	PRESSER, FORM	3	6	106	7	5	13	4.25

92902	590.684-014	ELECTRONIC-COMPONENT PROCESSOR	10	8	143	-7	3	-4	7.00
92908	976.382-014	COLOR-PRINTER OPERATOR	4	3	173	27	4	30	7.50
92908	976.384-010	PHOTO TECHNICIAN	13	14	453	69	10	79	6.75
92908	976.385-010	MICROFILM PROCESSOR	14	15	546	84	12	96	6.00
92908	976.682-014	PRINTER OPERATOR, BLACK-AND-WH	15	10	426	65	9	75	6.00
92908	976.682-022	MICROFILM-CAMERA OPERATOR	12	12	453	69	10	79	6.00
92908	976.684-014	FILM LABORATORY TECHNICIAN	2	2	120	18	3	21	4.25
92908	976.684-030	CONTACT PRINTER, PRINTED CIRCU	9	10	213	33	5	37	6.00
92908	976.685-014	DEVELOPER, AUTOMATIC	1	3	107	16	2	19	7.25
92941	716.682-010	EYEGLASS-LENS CUTTER	4	5	266	8	5	13	5.00
92944	699.685-014	CUTTER, MACHINE II	9	8	106	3	2	5	5.25
92951	679.682-010	BANDING-MACHINE OPERATOR	1	.	136	-1	2	1	.
92953	554.682-022	ROOFING-MACHINE OPERATOR	9	6	258	-6	4	-2	.
92956	641.685-090	STRIPPING-MACHINE OPERATOR	7	6	102	1	2	3	6.00
92968	692.362-010	SET-UP MECHANIC, CROWN ASSEMBL	3	3	111	-2	3	1	9.00
92971	556.682-010	BLOW-MOLDING-MACHINE OPERATOR	10	14	141	0	3	4	10.00
92971	641.685-038	DOMER	61	9	697	1	16	18	.
92974	920.665-010	CARTON-PACKAGING-MACHINE OPERA	5	.	100	3	3	6	.
92974	920.685-026	BOTTLE PACKER	8	4	200	5	7	12	13.82
92974	920.685-050	CIGARETTE-PACKING-MACHINE OPER	110	21	4,726	129	158	288	.
92974	920.685-066	LABELING-MACHINE OPERATOR	6	5	200	5	7	12	8.25
92974	920.685-098	TOBACCO-PACKING-MACHINE OPERAT	4	.	172	5	6	10	.
92998	599.585-010	STERILIZER	9	7	151	10	3	13	5.25
92998	690.685-014	ASSEMBLY-PRESS OPERATOR	27	16	434	28	8	36	5.48
92998	690.685-266	LEATHER-BELT MAKER	5	8	107	7	2	9	5.50
92998	699.685-010	BUTTON-ATTACHING-MACHINE OPERA	10	16	170	11	3	14	4.62
93905	721.684-022	ELECTRIC-MOTOR ASSEMBLER	122	77	467	-2	8	6	6.00

Chapter 9 (continued)

Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. open.	Med. wage
93905	723.684-010	ASSEMBLER	49	39	266	-1	5	3	5.00
93905	723.684-014	ASSEMBLER I	27	31	142	-1	3	2	4.66
93905	726.684-018	ELECTRONICS ASSEMBLER	917	943	4,999	-26	90	64	6.50
93905	729.384-010	ASSEMBLER, ELECTRICAL ACCESSOR	26	16	108	-1	2	1	5.00
93905	729.384-026	ELECTRICAL ASSEMBLER	120	89	409	-2	7	5	7.72
93908	724.684-026	COIL WINDER	1	2	177	-9	4	-5	5.25
93917	813.684-022	SOLDERER, PRODUCTION LINE	12	9	187	7	3	10	6.00
93921	363.684-018	PRESSER, HAND	61	81	1,583	99	34	133	4.25
93923	782.684-058	SEWER, HAND	93	70	1,351	94	66	159	5.00
93926	585.684-010	TRIMMER, HAND	5	6	215	8	5	13	4.25
93926	751.684-014	CUTTER, HAND	6	4	146	6	3	9	5.00
93926	781.684-074	CUTTER, HAND I	53	57	1,493	57	32	89	5.00
93926	781.687-070	TRIMMER, HAND	43	31	1,181	45	26	70	4.75
93926	783.684-022	LEATHER CUTTER	8	9	264	10	6	16	7.00
93926	788.684-082	OUTSIDE CUTTER, HAND	4	8	127	5	3	8	.
93926	789.687-030	CLIPPER	15	8	410	16	9	24	5.00
93935	529.686-014	CANNERY WORKER	64	67	1,499	80	32	111	7.42
93944	779.684-050	PLASTIC MOLDER	14	19	142	-8	4	-4	4.75
93953	700.687-058	POLISHER	14	15	370	9	1	10	6.00
93953	705.684-034	METAL FINISHER	11	16	407	10	2	11	5.50
93953	705.687-018	METAL SANDER AND FINISHER	5	3	139	3	1	4	6.00
93953	761.687-010	SANDER, HAND	10	12	296	7	1	8	5.00
93953	774.687-022	WARE CLEANER	5	1	139	3	1	4	5.00
93956	700.684-014	ASSEMBLER	93	60	891	2	16	19	4.50
93956	701.687-010	ASSEMBLER	34	22	216	1	4	5	5.00
93956	706.684-022	ASSEMBLER, SMALL PRODUCTS I	350	246	3,843	11	70	80	5.00
93956	706.684-086	PLUMBING-HARDWARE ASSEMBLER	101	96	683	2	12	14	5.00
93956	706.687-010	ASSEMBLER, PRODUCTION	1,045	722	11,720	32	212	245	5.50
93956	728.684-010	WIRE HARNESS ASSEMBLER	24	24	251	1	5	5	6.50

	93956	729.687-010	ASSEMBLER, ELECTRICAL ACCESSOR	209	203	2,531	7	46	53	4.25
	93956	732.684-014	ASSEMBLER	27	13	258	1	5	5	4.50
	93956	737.684-034	PRODUCTION ASSEMBLER	38	25	370	1	7	8	5.10
	93956	739.684-146	PICTURE FRAMER	22	28	309	1	6	6	5.00
	93956	739.684-158	TIRE MOUNTER	17	20	208	1	4	4	5.15
	93956	739.687-030	ASSEMBLER, SMALL PRODUCTS II	129	94	1,767	5	32	37	5.00
	93956	762.684-018	ASSEMBLY OPERATOR	28	11	143	0	3	3	5.30
	93956	763.684-014	CABINET ASSEMBLER	22	16	251	1	5	5	4.75
	93956	780.684-062	FABRICATOR, FOAM RUBBER	18	14	231	1	4	5	4.62
	93956	784.687-022	EAR-MUFF ASSEMBLER	12	1	139	0	3	3	.
	93999	361.684-018	SPOTTER I	7	6	235	11	5	16	6.50
	93999	524.687-022	BAKERY WORKER, CONVEYOR LINE	22	18	791	38	17	55	9.17
	93999	550.684-018	PAINT MIXER, HAND	7	5	225	11	5	16	7.62
	93999	705.684-018	FILER AND SANDER	4	5	182	9	4	13	4.25
	93999	709.684-090	TUBE BENDER, HAND I	11	12	289	14	6	20	10.34
	93999	711.684-010	ASSEMBLY LOADER	14	9	257	12	5	18	.
	93999	726.687-010	ELECTRONICS WORKER	19	14	856	41	18	59	5.25
	93999	728.684-022	WIREWORKER	4	3	107	5	2	7	7.00
	93999	749.687-018	MASKER	6	10	203	10	4	14	7.00
	93999	774.684-018	FINISHER	13	13	449	21	10	31	4.25
	93999	781.384-014	MARKER I	16	18	385	18	8	27	5.50
	93999	781.687-042	MARKER	18	23	524	25	11	36	4.75
	93999	782.684-018	EMBROIDERER, HAND	8	4	150	7	3	10	13.62
	93999	794.684-030	SAMPLE MAKER, HAND	10	12	235	11	5	16	10.00
	93999	976.487-010	PHOTOGRAPH FINISHER	6	5	182	9	4	13	5.50
	95008	559.662-014	WASH OPERATOR	2	1	337	-13	7	-6	.
	95099	590.362-010	FORMING-PROCESS WORKER	1	.	121	-2	3	1	9.25

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Table 35 (continued)

OES Code	DOT code	DOT title	Appli. FY 1996-97	UI elig. 1996-97	Emp. 1996	Ann. new jobs	Ann. seps.	Tot. open.	Med. wage
95099	950.585-010	VENTILATION EQUIPMENT TENDER	1	1	202	-3	4	1	9.75
97114	359.673-010	CHAUFFEUR	202	97	439	14	15	29	7.00
97114	913.663-010	CHAUFFEUR	48	34	180	6	6	12	6.00
97114	919.683-014	DRIVER	213	185	809	25	28	53	5.00
97199	919.683-022	STREET-SWEEPER OPERATOR	3	3	460	28	10	39	6.50
97199	919.683-030	DRIVER, STARTING GATE	3	1	690	42	15	58	7.50
97805	915.477-010	AUTOMOBILE-SELF-SERVE-SERVICE-	70	63	1,658	57	27	84	5.00
97808	915.473-010	PARKING-LOT ATTENDANT	316	248	6,667	495	379	874	5.00
97808	915.583-010	LOT ATTENDANT	11	11	251	19	14	33	5.00
97808	915.667-014	PARKING LOT SIGNALER	39	11	377	28	21	49	5.00
97951	921.682-014	PALLETIZER OPERATOR I	6	9	319	0	7	8	5.00
98502	583.686-014	FUSING-MACHINE FEEDER	11	18	256	4	4	8	4.75
98902	753.687-038	PACKING-LINE WORKER	161	109	598	7	15	22	5.00
98905	915.667-010	CAR-WASH ATTENDANT, AUTOMATIC	37	26	1,162	41	17	58	4.75
		TOTAL, ALL OTHER DOT CATEGORIES	3,123	2,029	36,708	680	983	1,663	.