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California Transportation Needs Assessment: The Transportation Barriers and Needs of Welfare Recipients and Low-Wage Workers

Authors

Blumenberg, Evelyn
Miller, Douglas
Schweitzer, Lisa
et al.

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Prepared by:

Evelyn Blumenberg, Doug Miller, Mark Garrett, Lisa Schweitzer
Karen Kitsis, Michael Manville, and Bravishwar Mallavarapu
The Ralph & Goldy Lewis Center for Regional Policy Studies
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Prepared for the California Department of Transportation

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Disclaimer

The statements and conclusions in this report are those of the authors and not necessarily those of the California Department of Transportation.

California Department of Transportation
Debbie R. Mah, Chief,
Division of Mass Transportation

James Ogbonna, Project Manager
California Department of Transportation

Members of the Policy Advisory Committee

Employment Development Department, Sacramento
Don Migge, Manager

Sacramento Employment & Training Agency
Christine Welsh, Manager

Tulare County Association of Governments
Bob Stocker, Assistant Director

Department of Social Services, Sacramento
Venus Garth, Manager

Metropolitan Transportation Agency, Los Angeles
Transit Services Coordination
Desiree Rabinov-Portillo, Manager

AC Transit, Oakland
Lionel Vera, Grants Manager

Sacramento Urban League
Rashid Sidqe

La Cooperative Compesina de California
Marco Micciche, Director

California Department of Transportation
Dr. Adamu Ayalew
Research Manager II

Department of Social Services, Sacramento
Julie Kimura, Manager

Facilitator: California Department of Transportation, Jake Smith, Senior Transportation Planner

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The opinions and conclusions expressed in this report are solely those of the authors and do not represent the policy of any other contributing agency or organization. The authors, therefore, are solely responsible for any omissions or errors in this report.

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Executive Summary

Given the overriding objective of welfare reform—to move welfare recipients into paid employment—social service agencies must establish programs to quickly enable welfare recipients to find jobs or else risk dramatic increases in poverty. Many policymakers have seized on transportation as a simple and effective answer to the employment difficulties of the poor on the assumption that inadequate transportation is a significant barrier to steady employment.

Subsequent to the passage of welfare reform in 1996, three federal programs were established to provide a seamless and integrated set of transportation services that, together, would improve the mobility of low-wage workers. The *Job Access and Reverse Commute (JARC) grant program,* a component of the 1998 Transportation Equity Act for the 21st Century (TEA-21), provides $150 million annually to assist states and localities in developing new or expanded transportation services to connect welfare participants and other low-income persons to jobs and employment-related services. Transportation programs can also be funded as part of the U.S. Department of Labor's *Welfare-to-Work Program,* a program designed to move hard-to-employ welfare participants into unsubsidized employment. Finally, perhaps the largest source of funding is *welfare* or *Temporary Assistance to Needy Families block grants.* These funds can be used to provide transportation subsidies and services to welfare recipients.

The purpose of this report, therefore, is to aid policymakers, planners, and administrators in using available funds to effectively plan for the transportation needs of welfare recipients and other low-income adults in California. More specifically, the objectives of this project are:

- To identify the transportation obstacles facing welfare recipients and other low-income individuals in California;

- To provide transportation options to better enable CalWORKs recipients and low-income individuals find and keep employment;

- To provide information and county-specific data to better assist local welfare agencies, transit providers, workforce development boards, state agencies, and the private sector in planning and implementing welfare-to-work transportation programs; and, finally,

- To develop a statewide strategy for applying for and allocating funding through the Job Access and Reverse Commute program.

The conclusions and policy options are drawn from six different analytical components; they include analyses of (1) the existing literature on transportation and the poor; (2) the demographics and travel patterns of welfare recipients and the poor in California; (3) the geographic location of welfare recipients and low-

income adults in relation to employment opportunities, childcare centers, healthcare clinics, and welfare offices; (4) the geographic location of public transit in relation to welfare recipients, low-income adults, low-wage employment, and licensed childcare centers; (5) commute mode and auto availability across California places; and (6) existing transportation programs for the poor. The following paragraphs review the principal findings of the research.

The relationship between transportation and the poor. A growing body of literature shows a strong relationship between transportation and the economic outcomes of low-income workers. Numerous studies find negative employment effects among welfare recipients who face transportation difficulties such as long commutes, the lack of access to personal vehicles, or limited access to employment opportunities. Moreover, a number of studies document the spatial mismatch between the residential locations of welfare participants largely concentrated in central cities and rapidly expanding suburban job opportunities, and assert the importance of improved public transit connections between the two.

Travel behavior of the poor. Many welfare recipients and low-income workers commute by car and travel relatively short distances to work and, therefore, may not face transportation barriers to employment. It is important to remember, however, that these figures likely underestimate the latent demand for longer distance travel since they exclude those low-income adults who are unemployed due to travel barriers. Regardless of employment status, however, the data show that most low-income adults live in households with automobiles. Finally, while most low-income commuters travel during peak periods, a higher percentage travel during off-peak hours compared to all commuters.

Geographic access to employment in urban areas. Although employment is growing more rapidly in the suburbs than in the central city, there remain high concentrations of low-income residents and low-wage job opportunities in many central-city neighborhoods. However, despite concentrations of central-city employment, some low-income, inner-city neighborhoods remain spatially isolated, particularly those located in larger urban areas. These neighborhoods include Watts in Los Angeles, East Oakland in Alameda County, South Sacramento in Sacramento County, and neighborhoods in Eastern and Southern San Diego County.

Low-income residents living in job-rich neighborhoods may also remain isolated from employment due to highly competitive local labor markets in which many applicants compete for each job opening. Residents in these neighborhoods may stand a greater chance of finding employment if they were able to travel to areas where fewer applicants apply for the available job openings.

Spatial isolation in suburban and rural areas. Typically, population and employment densities are much lower in suburban and rural areas than in urban areas. Therefore, on average, low-income residents in these neighborhoods commute longer distances than other commuters. In these neighborhoods, where fixed-route public transit

is often quite limited, the transit-dependent poor can be particularly isolated. Commute distances and times can be long. Even so, commute data underestimate the percentage of residents who are spatially isolated, since they include only those persons who are employed, and rural welfare recipients without access to automobiles are less likely to find employment than similarly-situated urban recipients.

Non-work destinations. The employment stability of low-income workers depends not only on their ability to commute to and from job sites, but also on their ease of travel to an array of other household-supporting destinations. Non-work destinations comprise the majority of all person trips. The difficulty of making these trips varies significantly across California counties. For example, in urban areas most childcare centers are located within ¼-mile from a transit line and travel distance to the closest healthcare clinic can be less than 2 miles. However, access to services is much lower in rural and agricultural counties. Particularly for those without automobiles, complex and time-consuming *non-work travel* can reduce the likelihood of employment; conversely, complex and time-consuming *commutes* can lead to foregone trips to important non-work destinations such as healthcare clinics or job training sites.

Existing transportation programs for the poor. Federal funds and interagency coordination have made available additional transportation services to low-income commuters. In particular, targeted funds available through the JARC program have been instrumental in the development and implementation of transportation services for the poor. However, it is difficult to determine the effectiveness of these programs since very few rigorous program evaluations have been implemented. Further, welfare funds have often been used to provide the 50% funding match required by the federal JARC program. State and local budget constraints have reduced available county welfare funds and made it increasingly difficult for JARC recipients to find agencies with the available resources necessary to provide the steep 50% match.

Policy options. In California, policymakers face the challenge of addressing the transportation needs of welfare recipients who live in a wide variety of settings. The vast majority of the poor, like the majority of the population, lives in urban areas; thirty-five percent of welfare recipients live in Los Angeles County alone. This suggests one possible policy—that the majority of funds focus on urban areas, and in particular in Los Angeles. However, reaching the greatest number of people in need is quite different from reaching those people who are in *greatest* need, and the highest poverty rates and greatest transportation gaps are not in our major cities. They are found more often in smaller towns and in rural and agricultural counties, where the poor are dispersed and public transit is quite limited.

An appropriate statewide policy, then, balances the transportation needs of the vast majority with the needs of those who are the most disadvantaged. This will require policies and program that:

- are tailored to the unique characteristics of individual counties and, even more importantly, individual neighborhoods within counties;

- reflect the particular needs of low-income adults, including their access to automobiles and employment status;

- enhance fixed-route transit services in job-rich, inner-city neighborhoods while experimenting with other types of transit programs such as demand-responsive services in areas with lower densities;

- enable welfare participants to purchase, insure, maintain, and otherwise drive reliable vehicles;

- rest on the rigorous program evaluation of existing welfare-to-work transportation programs; and

- facilitate interagency collaboration while allowing agencies and organizations the flexibility to use federal funds in ways that best meet the transportation needs of the poor.[1]

[1]To improve collaboration among stakeholders, Caltrans recently established a statewide committee on job access and reverse commute; the first meeting of the committee was held in Sacramento on March 20, 2003.

1. Introduction

1.1 Background

In 1996, Congress passed the Personal Responsibility and Work Opportunity Reconciliation Act, fundamentally transforming the provision of social assistance in the United States. The Act replaced Aid to Families with Dependent Children (AFDC) with the Temporary Assistance to Needy Families (TANF) program, a program that awards flexible block grants to the states, mandates tough work requirements as a condition for the receipt of public benefits, and imposes a 5-year lifetime limit on the receipt of public assistance. The new welfare program mandates employment for most participants and offers temporary financial aid and short-term employment assistance for welfare recipients transitioning into the labor market.

In compliance with federal law, in August 1997, California enacted the state equivalent of federal welfare reform, the California Work Opportunity and Responsibility to Kids (CalWORKs). The CalWORKs program provides cash aid and services to families with eligible needy children. As a condition of receiving aid, most adult recipients are required to meet work requirements by participating in welfare-to-work activities such as job search services, subsidized employment, vocational training, adult basic education, or work experience. The program has a lifetime 60-month time limit on the receipt of aid; within this time limit, applicants are eligible for 18 cumulative months of assistance. Social service agencies provide supportive services such as child care and transportation to help recipients participate in required program activities or accept employment.[2]

Given the overriding objective of moving welfare recipients into paid employment, social service agencies must establish programs to quickly enable welfare recipients to find jobs or else risk dramatic increases in poverty. Many policymakers have seized on transportation as a simple and effective answer to welfare recipients' employment difficulties on the assumption that inadequate transportation is a significant barrier to steady employment for many welfare recipients. As the research reviewed in Section 2 of this report shows, there is good reason to believe that this is the case. There is a growing body of research showing the negative employment effects among welfare recipients who face transportation difficulties such as long commutes (Ong and Blumenberg, 1998), the lack of access to personal vehicles (Blumenberg, 2002; Cervero et al., 2002; Danziger *et al.,* 2000; Ong, 1996; Ong, 2002), or limited access to employment opportunities (Allard, 2002; Allard and Danziger, forthcoming; Blumenberg and Ong, 1998). Moreover, a number of studies document the spatial mismatch between the residential locations of welfare participants concentrated in central cities and rapidly

[2]See the California Department of Social Services website (Available at: http://www.dss.cahwnet.gov/cdssweb/FAQ-sabout_27st.htm) for a description of the CalWORKs and state welfare-to-work programs.

expanding suburban job opportunities, and assert the importance of improved public transit connections between the two (Allard and Danziger, 2000; Bania, Coulton, and Leete, 1999; Lacombe, 1998; Laube, Lyons, vanderWilden, 1997; Pugh, 1999; Rich, 1999; Sawicky and Moody, 2000).

These studies have encouraged policymakers at all levels of government to develop programs and services to assist welfare recipients and other low-income individuals with their travel. Section 3 of this report reviews the three principal federal programs that, together, were established "…to develop seamless, integrated services addressing the transportation challenge of moving people from welfare to work (U.S. Department of Health and Human Services, 2000):"

- The *Job Access and Reverse Commute (JARC) grant program* is a component of the 1998 Transportation Equity Act for the 21st Century (TEA-21). It provides $150 million annually to assist states and localities in developing new or expanded transportation services to connect welfare participants and other low-income persons to jobs and employment-related services;

- *TANF block grants* can fund transportation services for TANF-eligible families so long as the expenditure reasonably accomplishes a purpose of the TANF program such as promoting job preparation, job search, and employment; and

- In the past, transportation programs were also funded as part of the U.S. Department of Labor's *Welfare-to-Work Program,* a program designed to move hard-to-employ welfare participants into unsubsidized employment.

With access to federal funds, California transit providers, social service agencies, and workforce development organizations have been working together to establish programs to meet the transportation needs of their low-income riders and clients.

1.2 Research Scope and Objectives

This California Transportation Needs Assessment (CTNA) is an analysis of the transportation needs and barriers of CalWORKs participants and other low-income individuals in California. More specifically, the purpose of this project is to:

- identify the transportation obstacles facing welfare recipients and other low-income individuals in California;

- recommend transportation solutions to better enable CalWORKs recipients and low-income individuals find and keep employment;

- provide information and county-specific data to better assist local welfare agencies, transit providers, workforce development boards, state agencies,

and the private sector in planning and implementing welfare-to-work transportation programs; and

- develop a statewide strategy for applying for and allocating funding through the Job Access and Reverse Commute program.

To accomplish these objectives, this study includes the following major components:

Literature review. A comprehensive literature review on the topic of transportation and the poor with an emphasis on (a) refereed journal articles, (b) program evaluations, and (c) local and regional studies.

Statewide Characteristics. An analysis of the geographic, employment, and transportation characteristics of welfare recipients in California (a) compared to the low-income population (150% of federal poverty line) and working-age adults, and (b) across California counties.

Maps. Mapping of the geographic location of welfare recipients and low-income adults (150% of poverty) relative to low-wage jobs, services, and public transportation.

Service Gaps. An estimation of the gaps in transportation services in California and within California counties.

Existing Programs and Services. A review of the current transportation services for welfare participants and other low-income workers with an emphasis on (a) the types of available programs, (b) collaboration among stakeholders (public agencies, non-profit organizations, and private employers), (c) the correspondence between county programs and the transportation needs of local recipients, and (d) program innovation.

Policy Options. The development of a set of policy options (a) to close the gap between transportation needs and available services, (b) to fund service improvements, and (c) to more fully integrate an array of stakeholders, particularly non-profit organizations.

1.1 Data and Methodology

There are no ideal statewide data from which to analyze the transportation needs and behavior of the poor in California's 58 counties. Some data—such as welfare administrative data or census data—allow us to understand the spatial location of the poor – but tell us little about their travel patterns. Other data—such as census data or data from the Nationwide Personal Transportation Survey (NPTS)—provide information on travel patterns but are less suitable for understanding the travel patterns of the poor. Census data provide information on commute mode and travel times by small geographic areas such as census-designated block groups but these data are not available for low-income travelers. The Nationwide Personal Transportation Survey, a national survey

administrated by the Federal Highway Administration, does provide information on the travel patterns of the poor but the small sample size limits any systematic analysis across geographic areas such as California counties.

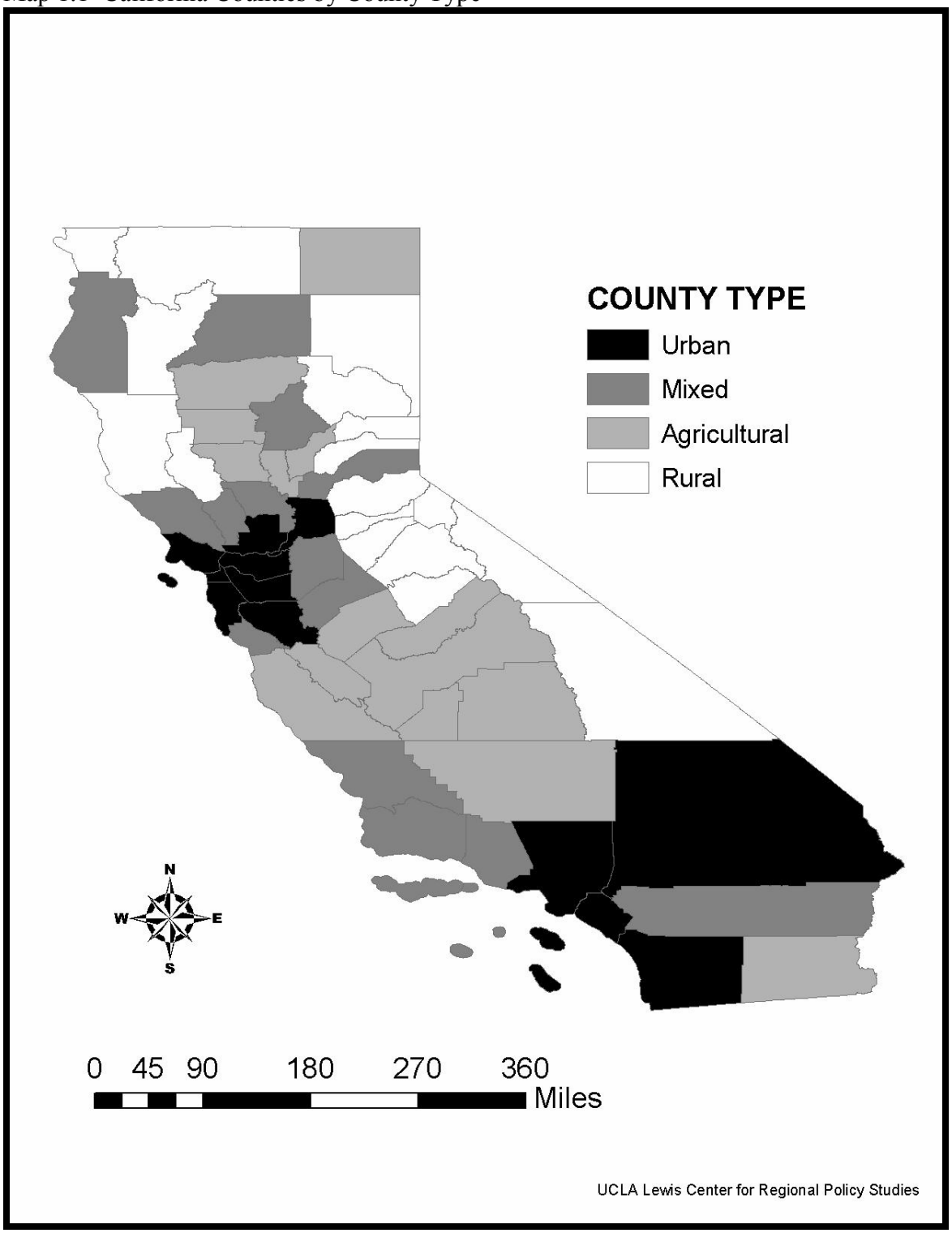
Small surveys—such as the welfare recipient transportation surveys conducted in Los Angeles and Fresno—provide excellent information on the travel patterns of welfare recipients. However, these surveys are county specific and, therefore, may not be generalizable across diverse California counties. Moreover, the small sample size of these surveys does not allow us to examine the spatial arrangement of activities within counties, an important component in the geographic targeting of transportation services.

Therefore, to explore the transportation needs and barriers of welfare recipients and the poor, our study draws from a wide array of data sources. Some of these data were geocoded by block group, in order to examine the spatial location of activities. The data for this study include:

- Micro-data from the 1990 U.S. Census that include demographic, employment, and transportation characteristics;
- Census tract, block group and place level data from the 2000 Census that include demographic, employment, and transportation characteristics;
- State administrative data on welfare recipients and employment in 2000;
- 2000 block-group and tract level employment data from American Business Information (ABI), a private vendor;
- State administrative data on licensed childcare centers;
- Welfare recipient transportation survey data for Los Angeles and Fresno;
- Public employment training organizations listed as part of the California Training & Education Providers (CTEP) database; and
- A Bus Route GIS database produced for the Federal Transit Administration (FTA) by the J. Joseph Moakley Center for Technological Applications at Bridgewater State College.

We use these data to (a) examine the demographic, economic, and transportation-related characteristics of welfare recipients and low-income adults in California, (b) measure spatial access to employment using a modified gravity model, (c) measure the proximity of welfare recipients, low-wage jobs, child care centers, job training centers, welfare recipients to public transit, (d) identify neighborhoods in California with the residential densities to support public transit but without existing fixed-route transit lines, and (e) examine the determinants of transit use and auto access across census-designated places in California.

Map 1.1 California Counties by County Type



Source: Brady et al., (2000).

California is a large and diverse state with 58 counties that differ significantly with respect to the demographic and economic characteristics of the population, the composition and robustness of the local economy, levels of transportation infrastructure, and the spatial location of jobs, employment, and services. Brady et al. (2000) show that welfare caseload dynamics vary across different types of counties and, as Map 1.1 shows, divide the state into urban, mixed, rural, and agricultural counties. We might also expect the transportation patterns and needs of the poor to vary across these county types. Therefore, we use this county typology to examine broad, cross-county variations in travel behavior, spatial access to employment, and determinants of transit use and auto access. We then assess whether existing transportation programs for the poor are well matched to the characteristics of the county in which they have been implemented.

Finally, we also examine existing welfare-to-work transportation programs and services. To do this, we reviewed the County CalWORKs plans submitted to the California Department of Social Services, the competitively-funded and earmarked programs funded under the JARC program, the Welfare-to-Work Federal Grant Addenda, the Welfare-to-Work Governor's 15% Grants and 25% Federal Competitive Grants, and the regional transit plans. We also contacted county welfare transportation coordinators to determine whether their agency provided any additional transportation services not mentioned in their county's original CalWORKs plan.

More detail on the data and methodology for this study is included in each section of this report and in Appendix A.

1.4 Organization of Report

In addition to this introductory chapter, the report contains seven sections and includes extensive appendices.

Section 2 of the report summarizes the key findings of existing research on welfare recipients and transportation. This section draws from both scholarly research as well as studies conducted by public agencies to better understand the transportation needs of the poor within their counties.

Section 3 highlights the demographic, economic, and transportation characteristics of welfare recipients, low-income adults, and working-age adults in California.

Section 4 reviews the existing federal funding programs to meet the transportation needs of welfare recipients and low-wage workers.

Section 5 includes the analysis of access to jobs and transportation. This section contains three analytical components. First, we analyze access to jobs by identifying neighborhoods and areas of the state with different densities of both jobs and low-income households. These neighborhood types serve as the basis for targeting transportation services. Second, we examine the relative availability of low-wage employment

accounting for competition for available job openings. Finally, we apply a measure of spatial access to employment in a set of statistical models to determine the effect of job access on welfare usage rates.

Section 6 focuses on the spatial distribution of child care centers, healthcare clinics, and welfare offices in relation to public transit.

Section 7 addresses the issue of transportation mode. Travel to employment and other destinations may not be problematic if individuals have reliable access to personal vehicles. However, many welfare recipients and low-wage workers are transit dependent. This section examines public transit and auto usage among the poor and identifies geographic areas in California where additional fixed-route transit may be both efficient and effective. At the conclusion of this section, we also use place-level data from the 2000 census to examine regional variation in access to private vehicles and public transit and the effect of mode on employment rates.

Section 8 includes an analysis of existing programs to meet the transportation needs of the poor. The section examines the types of programs that have been funded, the match between the programs funded and local transportation needs, the distribution of funds, the involvement of diverse agencies and organizations in the programs, and changes in the federal programs over time.

Finally, *Section 9* includes our conclusions and policy options. The policy options incorporate two different perspectives and emphasize the implications of each. The first perspective takes a statewide viewpoint, emphasizing the policy trade-off between focusing on large urban counties with high concentrations of welfare recipients versus smaller, agricultural counties where welfare usage rates remain highest. The second set of options focuses on targeting the appropriate set of transportation services to neighborhoods within counties.

The analysis for this report is quite extensive and draws from a variety of data sources. Rather than go into great detail regarding our data and methodology in the body of the report, we have included an extensive set of appendices which contain an explanation of our methodology for each of the analytical components of the report (Appendix A), detailed descriptions of the major federal funding programs (Appendix B), tables of the existing welfare-to-work or low-income transportation programs by federal funding program (Appendix C), and a list of census tracts by county that may not be adequately served by fixed-route transit (Appendix D). Finally, under a separate cover we have included a set of detailed maps and a data summary for each of the 58 California counties.

2. Literature Review

2.1 Introduction

A central challenge of welfare reform lies in connecting welfare recipients to the labor market. Because this was never a top concern of traditional welfare programs, the reform law has been accompanied by a host of new policies, whose purpose is to facilitate the transition from welfare to work. Many of these programs focus on providing transportation to welfare recipients, on the assumption that lack of mobility is one of the greatest employment barriers faced by the poor today. Research has largely proven this assumption correct, although scholars differ as to how significant transportation's role is in employment, and as to whether transportation is truly the source of the problem, and not merely the symptom of deeper issues. It has long been recognized that low-wage workers tend not to live near low-wage jobs (Kain, 1968, 1993), but some researchers have offered that this shows location, not mobility, to be the root of the problem.

Location has not been a priority of recent welfare programs, although it does have a place in the recent history of anti-poverty measures. In the past, so-called "housing mobility" programs have helped low-wage residents move to job-rich suburban locations, whereas urban revitalization programs have worked to attract manufacturing and retail outlets to disinvested urban cores. Housing mobility programs are premised not only on the idea that jobs should be closer to workers, but also on the idea that the poor, if immersed in a middle-class environment, will emulate the "good" work habits of their neighbors. Urban revitalization programs are premised on many theories, but among them the idea that urban residents should not have to escape the city—either entirely or on a daily basis—in order to be financially secure. Poverty is in this interpretation a sign of urban illness, and helping the city itself helps its residents.

Although there are a number of obstacles to location-based strategies, the greatest one may be time. Under welfare reform, recipients can be processed off the rolls in as little as eighteen months, and the urgency this injects into the process precludes most comprehensive efforts at remedying larger problems. The window available to welfare policymakers does not allow for cities luring industry anew to their hollowed-out cores, or eradicating the class or racial discrimination that may characterize their suburbs. The intractable nature of location-based problems defies the speed with which welfare reform demands solutions.

Hence the importance of transportation. Transportation policies, like child care and short-term job training initiatives, give welfare recipients the tools they need to quickly enter the workforce. Adequate transportation can accelerate commutes, make the process of job search easier, and make prospective workers more reliable, and thus more attractive to employers. Even if mobility is not the largest barrier faced by welfare

recipients, it is an immediate barrier, and overcoming it is paramount to the success of welfare-to-work strategies.

There is substantial literature on transportation's relationship to both poverty and employment, and a growing literature about its relationship to welfare. Certainly it is a barrier to work. In a study conducted in Illinois, (Julnes, 2000), over 25 percent of the former TANF clients interviewed said they had transportation problems. Among unemployed former recipients, this figure was 41 percent; among the employed, it was nine percent.

As with any body of academic research, there is considerable divergence of opinion about transportation's role, but it is possible to discern the following findings:

- Although the majority of welfare recipients live in inner-city or rural areas, most entry-level job growth occurs in suburban areas.

- Employment growth is more rapid in the suburbs than in the central city; however, most job openings are created through job turnover in existing jobs, many of which remain located in central city areas.

- There is significant evidence that earnings rise with commute distance, and in some instances with distance outward from the city center.

- The poor have greater access to automobiles than was previously thought. Nevertheless, the poor and welfare recipients are much more likely to be transit-dependent than the population at large, and thus much more likely to use public transportation as a method of commuting.

- Welfare recipients and other low-income adults are much more likely to work nonstandard hours (outside the nine-to-five workday), than are workers in the population at large. Transit schedules, however, are generally configured around standard work schedules.

- A large percentage of welfare recipients are single mothers, and the responsibilities of motherhood, including shopping, dropping children off at work/daycare, and responding to unforeseen family situations (illness, for instance) create unique travel patterns. Accommodating these travel patterns is a difficult but crucial aspect of any transportation program.

- The evidence that improved public transportation leads to greater employment rates among the poor is tenuous. The United States has not, in its recent history, developed in a transit-friendly manner; therefore, most commuters—even low-wage workers—rely on personal vehicles.

- There is a very strong positive correlation between access to private automobiles and employment. This is indicative, again, of the land use patterns of much of the United

States. Cars, however, are accompanied by high social and environmental costs, and the financial burdens of insurance and repairs can often be onerous for low-income families.

- Traditional public transit seems to have the most promise in those areas where a dense cluster of jobs can be connected to an equally dense cluster of residents. These densities tend to be found *within* urban areas, rather than in routes that connect cities to suburbs.

- Non-traditional, or demand-responsive, transit service is a relatively new commute mechanism, but one that shows promise despite its high cost. Because of its recent introduction, however, little is known about its long-term efficacy.

- In our car-centered country, many commute tasks are best accomplished with private automobiles. Although bolstering public transit is a crucial and worthy goal, eliminating some of the barriers to private car ownership will do much to help welfare recipients find and maintain employment.

The remainder of this section offers an historical overview of the transportation/poverty problem, and discusses contemporary research on the two issues that tend to dominate it. The first is the "spatial mismatch hypothesis," initially developed in 1968 and—though always evolving—still relevant today; the second is the question of transit, private automobiles, and the appropriate role for each. The literature review addresses the idea of the spatial mismatch first, then moves on to policy approaches that have been suggested for combating it. From there we examine the research on the travel patterns of the poor and other transportation barriers to their employment. Lastly, we evaluate the relative merits of transit and private vehicles for improving employment options for the poor.

2.2 The Spatial Mismatch Hypothesis

The poor, for a variety of reasons, often do not live near their jobs, and the distance between their residences and places of employment is often amplified by a lack of adequate transportation. Entry-level work is not located near the low-wage workforce, and the low-wage workforce in many instances has no easy way of traversing that gap. This isolation from employment has come to be known as "spatial mismatch"—the absence of entry-level jobs near low-income housing, and the exacerbating effect this has on attempts to escape poverty.

This is not a new problem. As early as 1965, in the aftermath of the Watts Riots, the McCone Commission identified poor transportation and spatial isolation as key contributors to the hopelessness and rage that had brewed in South Central Los Angeles. "Our investigation," the Commission concluded, "has brought into clear focus the fact that the inadequate and costly public transportation currently existing throughout the Los Angeles area seriously restricts the residents of disadvantaged areas, such as South

Central Los Angeles. This lack of adequate transportation handicaps them in seeking and holding jobs, attending schools, shopping, and in fulfilling other needs. It has had a major influence in creating a sense of isolation, with its resultant frustrations among the residents of South Central…particularly the Watts area (Governor's Commission on the Los Angeles Riots, 1966:35)."

To support this statement, the Commission rattled off a list of unsettling statistics. Heavily populated East Los Angeles was only six miles from job-plentiful City of Commerce, but a paucity of transit options made the City of Commerce "almost inaccessible" to residents of East Los Angeles. Hundreds of women from South Central traveled each day to jobs in the affluent areas of Brentwood, Beverly Hills, and Pacific Palisades, but their commutes averaged over two hours and required four buses. A resident of Watts who wanted to go the nearest Sears had to take two buses and spend one and a half hours en route. Everywhere, it seemed, were transportation-based barriers to employment, and geographic isolation from opportunity. Low-wage residents were not located near low-wage jobs, and there seemed no easy way to connect the two.

This was, at the time, a problem without a name. That changed three years later, when the economist John Kain (1968, 1993) published an analysis of the impact that housing discrimination had on African-American employment. Kain concluded that the spatial separation of black housing and employment exacerbated the poverty of inner city African Americans. He cited suburbanization, and its attendant movement of low-wage jobs away from the inner cities, as major factor in this separation. Although he never used the phrase himself, it was Kain's idea that came to be dubbed the "spatial mismatch hypothesis," and his article, although not the first to note the impact of suburbanization on low-wage labor, became a standard in the field.

Kain's theory was bolstered three months after his article was published, when the National Commission on Civil Unrest (better known as the Kerner Commission) released its report on the urban strife that had swept across America the previous summer, igniting riots in Detroit, Newark, Atlanta and elsewhere. Like the McCone Commission before it, the Kerner report saw the geographic disparity in job growth as one of the primary culprits in the previous year's turbulence. "Most new employment opportunities," the Kerner report noted, "do not occur in central cities, near all-Negro neighborhoods. They are being created in suburbs and outlying areas—and this trend is likely to continue indefinitely (National Commission on Civil Disorders, 1968:392)."

Faced with this dilemma, the Kerner Commission offered three possible solutions. "Providing employment for the swelling Negro ghetto population," it said, "will require society to link these workers more closely with job location. This can be done three ways: by developing incentives to industry to create new employment centers near Negro residential areas; by opening suburban residential areas to Negroes and encouraging them to move there; or by creating better transportation between ghetto neighborhoods and new job locations." The Commission went on to note that while "all three will require large public outlays," the transit option "has received little attention from city planners

and municipal officials," compared with the others (National Commission on Civil Disorders, 1968:392).

Today, of course, for reasons we discussed previously, transportation is the option that receives the *most* attention from planners and policymakers (Cervero et al, 2002). In the intervening years, the spatial mismatch hypothesis has evolved considerably, in response to both new academic research and to the changing nature of the labor force and American poverty. The McCone and Kerner Commissions viewed poverty as an African-American problem, but African Americans today hold no monopoly on the American underclass. Although African Americans are disproportionately represented on the welfare rolls, for instance, they do not comprise a majority of welfare recipients. Nationally, African Americans account for 40 percent of the welfare caseload; in California they are only 19 percent. By way of comparison, 36 percent of California's welfare recipients are Hispanic, and 30 percent are White (California Department of Social Services, 2001). The Kerner Commission was also concerned with the fate of young males, but as the policy focus has shifted to welfare recipients, it has become necessary to examine the needs of women, and particularly of young single mothers, who comprise 73 percent of California's caseload (California Department of Social Services, 2001).

The academic debate over the spatial mismatch hypothesis has been quite divergent, with many scholars refining the hypothesis and a few outright rejecting it. The best-known of the skeptics is Ellwood (1986), who in an influential study of inner-city Chicago argued that proximity to work is relatively inconsequential, and that mismatch is only an indicator of deeper problems of discrimination. His idea, which was dubbed "race, not place," re-emphasized racism's role in poverty, and downplayed job-access as a symptom rather than a source.

Other scholars, however, have demonstrated that spatial access to employment can be pivotal for impoverished job-seekers. In addition, a number of studies show that job accessibility is an important factor in the economic well being of welfare recipients. Ihlanfeldt and Sjoquist (1991) demonstrate that access to jobs accounts for between 30 and 40 percent of the difference in employment rates between whites and African-Americans. Further, a number of recent reviews of the mismatch literature (Holzer, 1991; Ihlanfeldt and Sjoquist, 1998; Kain, 1992; McLafferty and Preston, 1999) agree that as an idea it remains valid. Only one such review (Jencks and Mayer, 1990) finds the concept fundamentally wanting, and dismissed it outright. With respect to welfare recipients, Danziger and Allard (Allard and Danziger forthcoming) and Allard (Allard 2002) find that proximity to employment opportunities is associated with a higher probability of working and leaving welfare in the Detroit metropolitan area. Similarly, Blumenberg and Ong's (Blumenberg and Ong 1998) study of Los Angeles shows that neighborhoods with proximate entry-level work have lower welfare usage rates than comparable job-poor neighborhoods.

For those who accept the notion of the spatial mismatch hypothesis in some form—and it seems that a preponderance of researchers do—the broader themes remain

the same. Entry-level jobs tend not to exist near those who need them, and this geographic barrier exacerbates the already-considerable obstacles to escaping poverty. Entry-level work has migrated to the suburbs, but entry-level workers have been left behind in the cities. A corollary to the spatial mismatch is the skills mismatch. After entry-level jobs leave downtown areas, those jobs that remain tend to be knowledge-based, and require at least a bachelor's degree to hold (Kasarda, 1985, 1989). At the risk of oversimplification, the skills mismatch can be summarized by noting that downtowns are today the province of law firms and investment banks, not factories and distribution centers (Bauder and Perle, 1999; Browne, 2000).[3]

The statistics related to welfare recipients seem to confirm this assertion, and, on their surface, paint a picture of mismatch. In the 1990s almost three-quarters of all welfare recipients lived in the central cities or rural areas, while over 2/3 of new job growth took place in the suburbs (United States General Accounting Office, 1998). For jobs that tend to hire low-wage workers, the disparity is even more striking. Over seventy percent of new job growth in wholesaling, retail and manufacturing took place in the suburbs (Kasarda 2000). This does not mean that entry-level jobs do not exist in central cities. Care must be taken to distinguish between new job growth and turnover in existing jobs, and there is plentiful evidence suggesting that the rate of urban job turnover actually exceeds the rate of suburban job growth. At any given time, in other words, there may be *more* entry-level job opportunities in a central city than there are in its suburbs (Shen, 1998, 2001). The absolute number of jobs is not the problem. The problem lies in the relative competition for each job as it becomes available. In densely populated inner cities, many people vie for each opening, and this not only reduces the chances for employment but also, by virtue of demand soaring past supply, can depress wages (Kawabata, 2001; Ong, 1996).[4]

2.2.1 Spatial Mismatch and Modal Mismatch

The idea of competition for employment raises another important point, which is that the spatial mismatch is far from uniform in the extent and manner to which it affects cities. There are a host of reasons for this, but many of them can be attributed to cities' age (Pugh, 1998). Mismatch in the "conventional" sense—which is to say the sense that John Kain described, where geographic distance between home and work is the prime barrier—is far more common in the older metropolitan areas of the Northeast and Midwest. These are cities whose compact urban form is amenable to public transit since

[3]There is debate regarding the extent of the skills mismatch in explaining the employment outcomes of low-income, inner-city residents. See Handel, forthcoming.

[4]Ong points out, for instance, that South Central Los Angeles holds seven percent of the Los Angeles region's population, but only three percent of its jobs, "a disproportionate number of which pay low wages." Citing the work of Kirschenman and Neckerman (1991), he also notes that this labor/jobs ratio is exacerbated by firms that tend to avoid recruiting in low-income neighborhoods. Ironically, those employers who do tap this reservoir of labor can often get employees to work at very advantageous rates. At the risk of belaboring the Los Angeles example, a number of scholars and other observers believe that the city's garment industry, which thrives at a time when most of the American textile sector is floundering, owes much of its good fortune to downtown Los Angeles' vast reservoir of formal and informal labor.

industrial development was concentrated in central business districts proximate to inner-city residential neighborhoods. When work migrated outward, it was these cities, and their populaces, that were hardest hit by what Kain described. In these cities spatial mismatch was a product of the "hole in the doughnut" syndrome, the hollowed-out urban core with "hypersegregated" minorities trapped in it. Philadelphia (Private Industry Council of Greater Philadelphia, 1998) and Milwaukee (Center for Economic Development, 1998) share these characteristics, while Sugrue (1996) tells a similar story in chronicling the downturn of Detroit. Opportunity disappeared, those who could do so moved away, and those who could not spiraled into decline.

Such is the story of the conventional mismatch between residents and employment, and in it we find most characteristics of Rust Belt disinvestment. But cities, for the most part, no longer grow or look like Philadelphia or Detroit, and the problems that afflict these areas bear only parting relevance to those that afflict new urban agglomerations like Phoenix and Denver. These latter cities—and those like them (Jacksonville, Houston, Las Vegas) came of age when American land use policies had been subordinated to the needs of the automobile, and the distribution of their people and jobs reflects the greater mobility that cars conferred.

The archetype of this urban model is Los Angeles, which has been called the "first American city" for its low-rise, post-pedestrian development (Weinstein, 1996), and for its eventual organization around the private car.[5] Los Angeles is a useful example not only because it is the progenitor of this new breed of city, but also because, as the oldest and largest, it is the most-heavily studied. Its example is instructive. Unlike Detroit's hollow core, Los Angeles has a checkerboard pattern of growth (Blumenberg and Ong, 1998). And having matured around the automobile, most of its residents have access to one. The Brookings Institution, working with 1990 census data, found that over 80 percent of Los Angeles' public assistance recipients had access to automobiles, and another survey found that 65 percent of them use a car as their primary mode of transport. Less than 27 percent, by contrast, rode transit, and among working welfare recipients still fewer (less than 10 percent) used transit to get to work (County of Los Angeles, 2000).

By conventional measures, then, Los Angeles is not mismatched. Neither are most cities like it. But these cities suffer less of a spatial mismatch largely because many of their residents have access to automobiles, *not* because their land use patterns are amenable to human mobility. For those who do not have cars in Los Angeles, life is extraordinarily difficult, probably more difficult than it is for transit-dependent residents living in older, East Coast cities. In a sense, then, the new generation cities suffer from *modal* mismatch—a drastic divergence in relative advantage between those who have access to cars and those who do not (Taylor and Ong, 1995).

[5]It would be inaccurate to say that Los Angeles was originally designed around the automobile. Contrary to popular perceptions, Los Angeles' sprawling land use pattern was begun by the railroad and interurban streetcar companies, and then solidified by the automobile and the development of the freeway system. But the point remains the same—the idea of a pedestrian-oriented city had been dispensed with by the time Los Angeles began to grow (Wachs, 1996).

Variation in the conventional spatial mismatch story also exists across metropolitan size. The poor are less spatially mismatched in smaller metropolitan areas simply because there is less distance involved. Weinberg (2000) finds that residential centralization is an important determinant of black employment status, with the greatest effects in large U.S. metropolitan areas. In California, the spatial mismatch between welfare recipients and employment in the City of Fresno is far less severe than in Oakland, because, if need be, one can overcome Fresno's mismatch by a short bus ride or long walk (Blumenberg, 2002; Blumenberg and Hess, forthcoming).

2.2.2 Mismatch, Commute Distance, and Employment

A phenomenon often connected to the spatial mismatch is the tendency for wages to rise as one travels farther from a city center (Viscusi, 1992), and also tends to rise with commute distance in general. This is consistent with findings for the labor market at large, and is not unique to low-income workers. Across all incomes, commute distance is correlated with earnings (Taylor and Ong, 1995), but the reasons tend to differ between the poor and the population at large. For adults in middle- and upper-income households, higher incomes in many instances precede longer commutes. Although better-paying jobs do tend to be dispersed throughout metropolitan areas (Simpson, 1992), it is also true that higher income often leads to a desire for more housing and land, and that the relative costs of both are lower on the fringes of urban areas (Muth, 1969; Simpson, 1992). This desire for more space is frequently accompanied by a desire for better residential amenities, such as parks, quality schools, and low crime rates, and these too are more prevalent in suburbs than they are in inner cities. Lastly, of course, a higher income generally allows automobile ownership, which erases much of the inconvenience and opportunity cost inherent in a longer commute (Taylor and Ong, 1995). All of this justifies and precipitates a move to the suburbs.

There is some variation in the research on income and commute distance. Ong and Blumenberg (1998) find that welfare recipients in Los Angeles did not see an appreciable increase in earnings as commute distances rose, and in many instances did not see a rise in earnings at all. They speculate, however, that this was less a repudiation of the earnings/distance hypothesis than it was a wrinkle in it. Even if incomes rise with commute distance, the difficulty of making a long trip every day can lead to increased job turnover, and if the job cannot be maintained, earnings will inevitably fall. Similarly, Wachs and Taylor (1998) note that the distance/income correlation will eventually reach a point of diminishing returns. The costs of travel are implicitly deducted from wages, so extensive travel time may lower real earnings to the level that they would be if workers found employment closer to their homes. Rosenbloom (1994), however, finds that the lowest-income workers—those who make under $5,000—travel the shortest distance from home, and Murakami and Young (1997) find that low-income single mothers make significantly more trips within a three-mile radius of their homes than do non-low-income adults. On the whole, the distance-income correlation seems to hold.

To a certain extent, the desires of the middle class have helped fuel the spatial mismatch. Their movement to the suburbs helped spur the outward migration of retail merchandising, and this in turn influenced the location of wholesale distribution. Thus for the poor and non-poor we have an identical end result, but startlingly different causes behind it. For the non-poor, higher income is a way to the suburbs. For the poor, the suburbs are a way to higher income. Another way to look at this is to note that middle- and upper-income adults are also mismatched—many of them live in the suburbs and work in the cities—but their relative affluence gives them transportation options that enable them to overcome the distance barrier. This, again, suggests that mode, more than geographic isolation, may be the crucial factor in determining the effects of spatial mismatch.

When Kawabata (2001) applies a gravity-based model to measure the spatial mismatch and employment outcomes in Boston, San Francisco, and Los Angeles, the results seemed to reinforce the priority of mode over space. Although distance certainly plays a role in job accessibility, the ability to conquer distance plays a far greater one. "In all three metropolitan areas," she notes, "great discrepancies in job accessibility are found between auto users and transit users; job accessibility for transit riders is considerably lower, and the auto commuters' job-access measures are strikingly higher than the transit commuters' measures. A large difference between central cities and suburban areas is also discerned; job accessibility is consistently greater in central cities than in the suburbs. *This central city/suburb difference, however, is not as great as the auto/transit difference*" (emphasis added).

2.3 The Reverse Commute Policy Response

The problem of spatial mismatch has inspired a number of policy prescriptions, but certainly among the most popular is the idea of reverse-commuting. The reverse commute is precisely what it sounds like. It is a trip to work that cuts against the traditional grain of suburb to inner city, and instead moves central-city residents out to the suburbs. The reasoning behind it is equally simple. If entry-level jobs have migrated outward from cities and left low-income workers behind, then the easiest corrective may be to move the workers to the jobs.[6]

Reverse-commuting received perhaps its biggest boost when Congress passed the Job Access and Reverse Commute (JARC) bill, which specifically cited the uneven growth of jobs and allocated federal funds for projects that connected inner-city residents to suburban employment centers (49 USC §5309).

For understandable reasons, public transit is an appealing method of reverse commuting. If nothing else, there is a pleasant symmetry in the thought of new workers entering the labor market at a time when underused public transit could use a boost in ridership. Added to this is the practical fact that many welfare recipients are carless.

[6]This is essentially the third of the policy prescriptions offered by the Kerner Commission. (See discussion in Section 2.2 above).

Although only four percent of higher-income Americans lacks automobiles, fully 26 percent of the poor do not own cars (Murakami and Young, 1997). The largest, and not surprising, reason for this disparity is that cars are expensive. Low-income workers often lack the necessary income to purchase an automobile, and the initial purchase is by no means the only or even the largest expense—the American Automobile Association estimates that the average annual cost of owning a new car is $7,533, and $2,500 for a ten year old car (American Automobile Association, 2002). And obstacles to car ownership only add resonance to the idea of transit being a vital component to welfare reform. Implicit in this idea is the promise of two problems solving each other. If public transportation is able to break the barriers of the spatial mismatch, then it will validate both itself and welfare reform.

History and research, however, show that transit's record as an employment mechanism for the poor is somewhat lamentable. Public transportation has often stumbled in its attempts to connect the poor with jobs, even as the importance of transportation has been widely acknowledged. In the wake of the McCone Commission's report, and subsequent assertions by John McCone himself that "the availability of public transportation directly affects, if it does not control, the employability of persons living in poverty areas," the State of California funded a "Transportation/Employment Project," which ran a new bus line through underserved parts of Los Angeles.[7] The Transportation/Employment Project was intended to gauge the impact of better transit on low-income workers; its results were sadly ambivalent. Although ridership on the new bus line was consistently strong, and the new routes made some existing commutes far less circuitous, there was little evidence that the bus contributed absolutely to a decline in unemployment.

The Transportation/Employment Project ended in 1970. Circumstances have admittedly changed since then, and transit may yet prove to be a viable instrument of reverse commuting. In 2002, however, researchers at the University of California, Berkeley, released a comprehensive study on reverse-commuting in California in the 1990s. One of the most significant findings of the study was that over the last decade, reverse-commuting accounted for only 7 to 11 percent of all work trips. Additionally, within this relatively small group, almost all of the trips (19 of every 20) were taken by automobiles (Cervero et al, 2002). Even among the poor, the study finds that carpooling dwarfed trips taken by transit. Although transit use was much more common among low-income commuters than it was among all other groups, the private automobile was the chosen method of getting to work across all income groups.

On the surface this may appear counterintuitive, for transit seems, economically at least, to be the ideal fit for low-income commuters. The problem, however, lies less in how much transit costs, and more with its conformity to the needs of lower-income travelers. The barrier is less one of price than it is time and convenience.

[7]"Introductory letter from John McCone to Governor Ronald Reagan," Governor's Commission on the Los Angeles Riots, Staff Report of Actions Taken to Implement the Recommendations in the Commission's Report, Status Report II, April 18, 1967.

2.4 Travel Behavior, Mass Transit, and the Labor Market

One of the reasons transit has difficulty overcoming the spatial mismatch is that the mismatch is a transit problem almost as much as it is a poverty problem. The same forces that have moved jobs to more dispersed locations—suburbanization and deindustrialization—have also created serious challenges for mass transit. Spatial mismatch also confounds transit by requiring movement *outward* from cities, which upends its existing mission. Most public transportation systems have been designed for middle-class suburban riders heading inbound to cities, not the other way around.

This last point, in particular, is no idle concern. Transit works best as a commuting instrument when there are dense clusters of job and residences (Levinson, 1992). This rarely happens in the United States, and it happens with particular infrequency for reverse commutes. Suburban homes may be clustered around transit stops, but suburban jobs are generally not (Orski, 1998; Holzer and Ihlanfeldt, 1998; Lacombe, 1998; Regenstein et al, 1998). A middle-class commuter who emerges from a city rail station often finds herself in the middle of a pedestrian-friendly central business district. A low-income worker dropped off at a suburban bus depot, by contrast, more likely finds herself miles away from the corporate office park or highway-side building that is her place of employment. According to Orski (1998), fully 40 percent of entry-level suburban jobs are not accessible by transit routes. And in a 1998 report on welfare recipients in Boston, the Bureau of Transportation Statistics found that that city's comprehensive transit system was of almost no use to job-seeking TANF participants. Although 98 percent of the TANF recipients surveyed lived within a quarter-mile of a transit stop, the transit system only provided excellent service throughout the immediate Metro area. Over 70 percent of the city's entry-level jobs, by contrast, were in the suburbs (Bureau of Transportation Statistics, 1998).

Transit also tends to operate in sync with the typical 9 to 5 business day, but low-income workers often hold second-shift jobs whose hours extend past transit's operating times (Garnett, 2001). Most welfare recipients are women, and while 62 percent of all women work standard schedules, only 57 percent of low-income women do the same. The disparity becomes even greater when children are considered. Low-income women with children are nine to ten times more likely work nonstandard hours than are women without children (Presser and Cox, 1997). There is some debate as to why this is the case. Within the general population, education has a strong positive correlation with standard work hours. Studies show, for example, that education varies inversely with the probability of an individual working between 7:00 and 10:00 p.m., and between 10:00 p.m. and 6:00 a.m. (Raphael and Stoll, 2000). But Presser and Cox (1997) suggest that in the case of women, "education is not a significant explanation." In their research, 31 percent of low-income married women cited the availability of "better child care" if they worked non-standard hours, while over half said that the hours were requirements of the job. Presser and Cox also note that the jobs these women held were also some of the country's fastest-growing, meaning that the trend toward non-standard hours will likely increase.

The findings of Presser and Cox (1997) highlight another obstacle to making transit an effective commuting mechanism for the poor—the large number of welfare recipients that are single mothers. Single-parents tend to make more trips per day than adults in other types of households, and studies show that this holds true for low-income single mothers as well (Hu and Young, 1999; Rosenbloom, 1994). The reasons are not hard to discern. Compounding the task of getting to work are the need to perform domestic errands, to drop off and pick up children at either school or child care, and to react to emergencies and other unplanned family events (a sick child, for instance, or a problem with a residence).

Mass transit is ill-equipped to respond to such situations. A mother who takes two buses and over an hour to get to her suburban job is in no position to quickly depart in the event of a family crisis. Nor is transit often amenable to the "trip-chaining, the drop-off at school en route to the job, and vice-versa. Family life, in other words, is rarely conducted on a fixed schedule, while transit is. A certain amount of tension is thus inevitable.

2.5 Public Transportation and the Poor

Likely the result of the issues discussed above, a positive correlation between public transportation and low-income employment has never been convincingly demonstrated. In a study of low-income employment in Portland and Atlanta, Sanchez (1999) finds that proximity to transit might have a small positive effect on employment, but he also cautioned that his results were far from conclusive. In a subsequent study he finds that transit has almost no bearing on employment (Sanchez et al., 2003). Likewise Thompson (1997), in an investigation of Dade County, Florida, finds only a slender connection between transit and employment. Finally, Ong and Houston (2002) find that levels of transit access have only a small effect on the employment rates of welfare recipients without automobiles.

In light of this information, and in light of a dispersing population and transit's relatively small budgets, the challenge for public transportation providers lies in putting scarce funds where they are most effective, and—not least—avoiding costly projects that are unlikely to generate results. Current research suggests that transit strategies might best be concentrated in two avenues—so-called "demand-responsive" service, which do not operate on fixed routes but instead cater to the specific needs of local riders and fixed-route transit *within* urban areas (as opposed to routes running from urban areas to the periphery). The first of these, it should be noted, has yet to undergo extensive empirical evaluation. Most demand-response systems aimed at low-income commuters are quite young, arising as they have in the wake of welfare reform, and their effects to this point are difficult to measure. Still, they merit some discussion.

2.5.1 Demand-Responsive Transit Service

Demand-responsive transit service is publicly-funded transportation tailored to particular riders' needs. Its most common method of implementation is the vanpool, a shuttle that carries workers who live in roughly the same location to different job sites throughout the metropolitan area. The advantage of demand-responsive transit service is fairly obvious; it eliminates the expense and waste of running a fixed-route system through a geography that lacks clusters of fixed destinations. Mass transit in the suburbs is hobbled by the fact that no one ever seems to be going to the same place, and that little else is around them once they get there. This problem was highlighted at the outset of welfare reform, when a number of large corporations announced programs to hire recipients coming off the assistance rolls. The altruism of these firms was counterbalanced by their inaccessibility; many were located in suburban office parks, and efforts to reach them from the inner city were stymied by their inaccessibility to transit (Pugh, 1999).

Demand-responsive transit service is designed to break this barrier, and it is not a new idea. As early as 1967, when the Transportation/Employment Project was concluding a 24-month trial period of new mass transit in Los Angeles, its administrators noted that "buses may not be the best answer to the problem of getting Project area people to the scatterings of available jobs. Considering the overwhelming numbers of potential origins and destinations, and the fact that many of the passengers use the services only until they are able to use their own automobiles, it seems doubtful that many cases will be found where passenger volumes over fixed routes will be of sufficient magnitude to justify the costly operation… (California Transportation/Employment Project, 1967:23)."

Instead, the report recommended "less organized and more ad hoc arrangements," including vanpools and jitneys (California Transportation/Employment Project, 1967:23). But the authorities never actually initiated such a program, and the idea fell by the wayside. In the interim, however, vanpools and similar arrangements became a very popular method for moving disabled people, and today many larger cities—Los Angeles included—contract vanpool service out to private companies in order to comply with the Americans with Disabilities Act (Access Paratransit Services, 2002; Cervero, 1997). The services tend to be extremely expensive, partly because of the equipment needed to transport the disabled, and partly because the drivers tend to make more money than transit or taxi drivers (Cervero, 1997).

Preliminary efforts to provide demand-responsive service for the poor, however, indicate that it, too, will be a costly endeavor. A number of pilot projects have been undertaken in cities throughout the country, and early reports on their efficacy have been mixed. While none of the projects has been as expensive as transporting the disabled, costs have nevertheless ranged between $10 and $20 per ride, which rivals the cost of giving every passenger a private trip in a taxicab (Cervero et. al., 2002).

Bridges to Work, a project of Public/Private Partnerships, began perhaps the largest experiment in demand-response transit in 1997, in metropolitan Chicago. The program used a combination of express buses and vanpool services to move workers from impoverished residential areas (most of which were public housing) on the South and West sides of Chicago out to the fast-growing industrial complex near O'Hare Airport. The interim field report that Public/Private Partnerships released in 1999 (Elliot et al, 1999) offered a wealth of practical information on demand-responsive transit, if also a somewhat tempered endorsement of the approach. Over the course of two years, the Bridges to Work program had enrolled 1,960 people, 982 of whom were eligible for benefits. Of the 982, the Bridges program placed 599 in jobs, a placement rate of 61 percent. But the report also emphasized that merely running a transit service was not enough, because entry-level jobs, while not considered "skilled" employment, are also not uniform, and welfare recipients must be matched to appropriate openings if work is to be found and maintained. "Although it would be misleading to say that the transportation has been simple," the Bridges' Field Report said, "in the end, the logistics of taking people from Point A to Point B is an inherently solvable problem." Finding them a job is less so, "Unless organizations are good at the job-matching process, there will be lots of empty seats on the bus (Elliot et al, 1999:3)."

Perhaps most surprisingly, in its recommended list of "best practices," the Bridges team erected a firewall between work and child care, and said that in Bridges' experience, demand-responsive transit could only be effective if it concentrated solely on moving people to work:

> Operating high-quality, efficient, flexible, punctual transportation is hard enough without imposing on the service the demands of getting people and their children to the day care center…We strongly discourage integrating child care centers into the routes and schedules of an employment-focused transportation system… The potential for increased cost, time, complications and inconvenience is great, perhaps great enough to threaten or scuttle the program altogether. More stops, added time, sick children, anxious parents, and the few extra minutes it takes to talk to the teacher or gather up the child's belongings are distractions from the main mission…(Elliot et al, 1999:15).

Within this recommendation lies an inherent contradiction. Part of the ostensible appeal of demand-responsive transit is its flexibility, and a large portion of the need for that flexibility is the fact that many welfare recipients are single mothers who must juggle work commutes with child care. Rigorously separating work and family trips does not solve that problem, and indeed leaves it intact. A single mother using this service still needs to find an entirely different way to get her kids to day care. The fact that a transportation provider does not want to add complexity to its schedule, after all, does not mean complexity is removed from its clients' lives. The research of Presser and Cox

(1997) and Henle and Kinsella (1996) suggest that child care may soon be the single-greatest concern of low-income working people. Separating daycare from transportation programs thus offers the benefit of making the program work at the cost of rendering it ineffective.

2.5.2 Modal Mismatch and Fixed-Route Mass Transit

One of the most important lessons to be drawn from the body of work on spatial mismatch is that "space" is reflected as much by time—and perhaps more so—as it is by distance. A long geographic commute is not a barrier to work if it can be completed quickly, whereas a short commute, distance-wise, can be a severe obstacle if there is no speedy way to complete it. A middle-class suburban commuter may be untroubled by a thirty-mile drive to a job in an adjoining suburb, because he may be able to drive on uncongested freeways and make the trip in under twenty minutes. Likewise, a Boston-based stockbroker may find little impediment in traveling to New York three days a week, if her company can pay for the hour-long plane ride and a comfortable business class seat in which to make it. For this woman, the benefits of directness and technology make New York seem far closer than the 400 miles it actually is. But for the men mentioned in the McCone Commission report, who needed over two hours to traverse the short distance between East Los Angeles and City of Commerce, the City of Commerce was not six miles away; it may as well have been on the moon.

Understanding the importance of time also helps identify the ideal uses of cars and public transit. We have already discussed why it is that fixed-route transit often does not excel at moving people long distances outside of cities. The reasons are numerous, but a central problem is that the commute is often a long one, and fails to get riders very close to their destinations. This can be especially troublesome during the crucial period of time when welfare recipients are searching for jobs, and have to navigate a variety of unfamiliar settings (Blumenberg, 2002; County of Los Angeles, 2000). Learning transit routes, making multiple connections, paying for cabs to plug the shortfalls in those connections, and most of all spending hours in travel seem hard to justify when the payoff—a job—is at best uncertain.

The situation changes somewhat once work is secured. Tolerance for even fairly complicated transit routes rises once a routine is established, and familiarity can lead to a diminished perception of barriers (Blumenberg, 2002; County of Los Angeles, 2000). Still, in these circumstances, it is hard to compete with the convenience of an automobile, which may explain the tendency of welfare recipients to "graduate" away from transit—to get jobs, save money, and then purchase cars (Rosenbloom and Burns, 1994; Ong, 1996).

Transit excels, and indeed has numerous advantages over the automobile, in intra-urban transportation, moving people from place to place within dense urban areas. It is within urban areas that we have high densities of jobs and homes, and within urban areas that other social costs, including traffic and inadequate parking, most detract from the

advantages of the private automobile. And, as will be discussed in more depth later in this report, it is in precisely these areas that low-income populations tend to be underserved.

Better and more frequent intra-city service could have a dramatic impact on the lives of the urban poor. Replacing circuitous routes with direct ones could reduce time-induced barriers, and the purchase of more vehicles could improve on-time performance, thereby reducing the fears of tardiness to work and consequent TANF noncompliance. More direct service can also positively alter people's perceptions of their transportation burdens, just as confusing or labyrinthine routes can dissuade people from even attempting to ride public transit. In some cases, simply providing better transportation information can reduce barriers to transit ridership. In one of its early assessments of Los Angeles, the Transportation/Employment Project report described the tortuous series of changes needed to move through Los Angeles and the demoralizing effect this had on low-income residents: "People who are badly in need of transportation are not using the transit facilities that exist and the pseudo-immobility thus created unnecessarily compounds their feelings of isolation (Transportation-Employment Project, 1967:42)." Over thirty years later, research conducted on welfare participants in Marin County, California, reinforced this notion—welfare clients complained that confusion about the availability of transit in general was compounded by confusion over which services were available under the state's welfare program (Nelson/Nygaard Associates, 2002).

There has also been significant discussion of expanding transit service hours, to better accommodate the nonstandard work shifts of many TANF participants. Some researchers believe that there is a considerable latent demand for such service, and that the introduction of more late-night buses, for instance, would generate a substantial increase in ridership. Endeavors such as these must bear in mind other factors, however, such as perceptions of safety. Even if buses run well after midnight, it is an open question as to whether lone females would feel comfortable riding them on a regular basis (Schulz and Gilbert, 1996).

Some literature suggests altering the priorities of public transit agencies, and reconfiguring transit projects toward low-income riders who depend on them, rather than toward upper- and middle-class commuters who use them by choice. A common topic in this discussion is the budgetary tug-of-war that often exists between bus service and rail. Rail is extraordinarily expensive, and while it may succeed in shifting some middle-class commuters out of their cars, its allure is counterbalanced by its lack of thrift; compared to buses, rail offers less overall service for more money. It also, obviously, cannot be rerouted with ease, the way buses can.

Large expenditures on rail service necessarily detract from bus service, and some scholars contend that this leads to the poor, who often lack many transportation options, subsidizing additional choices for the better off (Garrett and Taylor, 1999; Pucher, Hendrickson and McNeil, 1981; Wachs and Taylor, 1998). While some California counties use vouchers and fare reductions to make bus travel less expensive, other scholars argue that bus service will truly improve only when it is better and more

frequent (Cervero, 1990). A focus on trains impedes this goal. The issue of the majority of transit funds being allocated to a minority of more affluent riders, motivated the successful opposition of Cleveland planners to commuter rail line extensions in the 1970s, and helped them win expanded bus service instead (Krumholz and Forester, 1990). Likewise in the 1990s, the Bus Riders Union in Los Angeles successfully sued the county's Metropolitan Transportation Authority (MTA), alleging that the amount of funds expended on subways constituted spatial discrimination, and neglected the majority of transit riders (Brown, 1998; Grengs, 2002; Taylor and Garrett, 1998). In this instance, although 94 percent of the MTA's customers were bus patrons, the MTA spent 70 percent of its budget on rail. Almost three-quarters of its budget, in other words, went to one-twentieth of its ridership (NAACP Legal Defense Fund, 1996).

Rail-bus battles have been hard-fought. Rail is often seen as a vital weapon against smog, congestion, and other externalities of the private automobile. But while the elimination of air pollution and traffic are laudable goals, there is little evidence that the initiation of rail service, by itself, will accomplish them. Data from the 1995 Nationwide Personal Transportation Survey show that public transit captures only two percent of daily person miles traveled (Hu and Young, 1999). Transit riders comprise a slightly higher percentage among metropolitan commuters; just less than five percent of commuters report transit as their usual mode of transportation to work (Rosetti and Eversole, 1993). Still, given these figures, even doubling transit's mode-share would do little to reduce auto travel, and there is good reason to believe that any road space freed up by drivers choosing to use transit would not stay vacant for long (Downs, 1992). Other motorists would soon fill the gaps, because traffic is itself a disincentive to drive, and any reduction in traffic also increases the rewards—however briefly—for those who choose to use a car. Thus for every person who abandons a car to climb aboard a train, another may climb into a car and occupy the road space given up. This phenomenon, called "triple convergence" is a result of commuters switching from other times, other routes, and other modes in response to a decrease in congestion at a particular time and place (Downs, 1992).

2.6 Automobiles and the Poor

The literature on automobiles and employment outcomes is far larger than that on transit and employment, perhaps because there are a great many more automobiles in the United States than there are transit services or transit patrons. It is no secret that the automobile dominates American transportation. Eighty-six percent of all person trips in the United States are taken by private car (Hu and Young, 1999). Even among the poor, the car is remarkably prevalent. Seventy-four percent of low-income households own a car, and 64 percent of low-income, single-parent households do as well (Murakami and Young, 1997). Still, low-income people, and particularly welfare recipients, are far more likely than the general population to use public transportation to reach jobs. Among welfare recipients in Los Angeles, for example, 20 percent commuted by way of transit (County of Los Angeles, 2000). This is 10 times greater than the population at large. It is also, however, only one-fifth of all welfare participants.

The evidence that automobiles make it easier to get and keep work is diverse and persuasive. Low-income adults drive to work, and use cars to search for jobs, because it works. In both compact cities known for comprehensive transit systems, and in more dispersed cities known more for auto-dependency, research shows that the private automobile is a pivotal factor in employment rates for low-income people. Ong (1996) finds that access to a car correlates positively with employment, hours worked per month, and mean monthly earnings. It did not, however, have any effect on wages—a car seems to allow one to work more hours, but not get paid more for each hour worked. Other studies (Cervero et al 2002; Blumenberg, 2002; Ong, 2002; Danziger et al, 2000; Ong and Blumenberg, 1998; Taylor and Ong, 1995; Orski, 1998; Waller and Hughes, 1999) reach similar conclusions, and find the automobile to be a more powerful determinant in job-seeking and job-retention than other modes of travel.

In their exhaustive study of reverse-commuting in California, Cervero et al., (2002:173) conclude that "The weight of empirical evidence and case experience lends considerable credence to the argument that assisting the inner-city poor with the purchase of a car can stimulate employment. Statistically…owning a car is a far more powerful predictor of whether people will find jobs and get off welfare than the availability and quality of transit services." Kawabata (2001) finds that workers with autos are more likely to work at least 30 hours per week, more likely to be employed, and had higher earnings than people dependent on transit. And, Raphael and Stoll (2000) find auto ownership can explain interracial differences in employment. In the general population, African-American unemployment exceeds that of whites by 11 percent. Among the population who own cars, however, African-Americans are actually *more* likely than whites to have jobs. When the same experiment is run between whites and Hispanics, the employment gaps between these two groups are similarly eliminated.

A note of caution is in order about these results. Causality is an issue in many studies that examine transportation and employment outcomes. While access to personal vehicles can increase the probability of employment, employment also increases the probability of auto ownership. Using an instrumental variable to address this issue of causality, Ong (2002) finds that auto ownership remains an important predictor of employment. Likewise, Raphael and Rice (2002) control for causality bias and still find auto access to be an important factor in employment.

The advantages of the automobile are real, and intuitive. Every reason that transit stumbles in attempts to overcome the spatial mismatch is a reason the private car can succeed. The private automobile is useful to the poor for the same reasons it is useful to everyone else. It allows flexibility, accommodates a schedule that may include unforeseen travel requirements (sick children, etc.), and decreases travel time by avoiding the multiple stops and sometimes circuitous routes of public transit. Indeed, in some instances, the car is more important to low-income workers than it is to those who have higher incomes. As has been mentioned, low-wage workers are more likely to have inconsistent work schedules that require travel during off-peak hours, and cars eliminate the need to navigate fluctuating transit times. Moreover, TANF recipients can be

sanctioned for being late to work, and a late bus can therefore result in lost benefits. In research done in Iowa on sanctioned families, over half cited transportation as a major factor in their noncompliance (Goldberg, 2001). Owning an automobile can provide a measure of control over one's fate, and alleviate the need for dependency on buses or trains.

It is worth noting that the strengths of the automobile should not be seen as an indictment of mass transit. Although the automobile is a remarkably efficient tool, many of its advantages, are, at bottom, structural, and related to issues of land use and governance rather than to any inherent superiority it enjoys. The private car has a dramatic effect on employment for the simple reason that the United States is designed around cars, and those who have one will, as a result, do better than those who do not. Both the efficacy of automobiles and the relative inefficacy of transit spring from the same source, which is the vast amount of federal policy that over the past fifty years has reconfigured America and turned it into an autocentric nation (Jackson, 1985; Duany et al, 2000). Zoning and other land use policies have pushed residences and workplaces farther apart, have subsidized the individual driver with free parking, extensive freeway systems, and fuel subsidies, and have promoted low-density development (Jackson, 1985; Wachs and Taylor, 1998). In such circumstances the private car is bound to perform better than public transit.

That said, the idea of using the private automobile to overcome poverty comes laden with its own encumbrances. Cars carry with them well-known social costs, including traffic congestion, air pollution, and the security anxiety that accompanies increasing dependence on foreign oil. All of these costs must be weighed in any proposal to assist welfare recipients with auto ownership, and a clumsy effort at introducing cars risks unnecessarily setting environmental and social goals at odds with each other. "On the one hand," Kawabata (2001:23) comments, "improving transit services is relatively environmentally friendly, but it is not easy to implement transit services that serve vast suburban areas. On the other hand, encouraging auto ownership is likely to greatly enhance spatial mobility, but increasing the number of automobiles aggravates congestion problems and pollution."

Such dilemmas need not be intractable. Stoll (2000) for instance, points out that if cars are used primarily for reverse commuting, they are unlikely to make traffic congestion significantly worse. It is also worth noting that neither environmental nor transportation policy is likely to be successful if confined largely to those without choices. If the landscape of the United States dictates that a car is necessary for economic success and self-sufficiency, it seems neither fair nor pragmatic to discourage auto ownership among those of lower-income, while at the same time expecting them to climb beyond poverty. Most middle- and upper-income families could not make do without automobiles; a lower-income family, with even scarcer options and resources, seems unlikely to be different.

Nevertheless, significant problems exist with the notion of low-income automobility. There is a large difference between a car and a reliable car, and most

welfare recipients cannot afford the latter. The cars they drive tend to be old (Blumenberg, 2002; Ong and Houston, 2002; County of Los Angeles, 2000; Murakami and Young, 1997), tend to pollute heavily (lending credence to environmental concerns), and are usually less than a year away from extensive and costly repairs. The car, in other words, may help get a job, but it can also become a money pit in its own right. Even if welfare recipients could afford better cars, in many states they are not allowed to have them. A common component to welfare legislation is the vehicle asset limitation, which prohibits anyone on public assistance from owning an automobile worth more than a certain value; in California the limit is $4,650. For those living in inner cities—a category that includes the majority of TANF recipients—automobile insurance is prohibitively expensive.[8]

Lastly, of course, there are political barriers to assisting welfare recipients with the purchase of automobiles. Welfare reform was spawned in a climate of hostility to welfare itself, and it sprang in particular from a notion that overly generous government programs were compounding poverty by creating an endless cycle of dependency and entitlement (Glazer, 1971; Murray, 1984; Cloward and Piven, 1987). The veracity of these notions is debatable at best, but their prevalence is not, and programs designed to give TANF recipients cars would need to contend with them.

These obstacles have not stopped a number of researchers (Taylor and Ong, 1995; Gardenhire, 2000; Ong, 1998; Ong, 2002; Orski, 1998; Waller and Hughes, 1999; O'Regan and Quigley, 1998a, 1998b; Shen 2001) from recommending that public funds might better be spent on helping welfare recipients secure cars, instead of on expanding public transit services. The laws governing TANF allow states to use federal block grants to provide direct purchase assistance for automobiles, to help pay for insurance, and to provide loans for would-be buyers. The last option, in particular, seems to hold promise, for it not only gets TANF participants cars, but also helps them build (or rebuild) credit, while establishing a relationship between them and local financial institutions. Ways to Work, a partnership that secures two-year loans for TANF

[8]The insurance issue deserves a bit more examination, as it is particularly troublesome. In 1998, the Joint Economic Committee of Congress released *Auto Choice: Impact on Cities and the Poor*, which enumerated the ways in which current insurance policies exacerbate poverty and inequality. In inner cities, auto insurance is exorbitant, and costs on average $1,000 more than it does in suburbs. In Los Angeles, for example, the average insurance for a 38-year old female with a clean driving record is almost $3,500. This is a case, of course, of the largest expense falling on those with the fewest resources. Families in the bottom income quintile who buy auto insurance spend seven times the percentage of their income on it than do families at the top; they often spend more than the face value of their vehicle. This happens for two reasons, the first being that inner-city accidents, although far less likely to cause serious injury, are far more likely to generate insurance claims. The large number of claims naturally drives up premiums. The second reason is more insidious, for it feeds on itself. Families unable to afford insurance, but who nevertheless need cars, often choose to drive uninsured. This has a number of results. Uninsured drivers often become criminalized, which further hurts their chances of climbing out of poverty, and their presence on the roads causes premiums to rise still higher, which compounds the problem for everyone else. As premiums rise, more people are priced out of the system, which leads to more uninsured drivers, and the cycle begins anew. A 1995 survey conducted in California revealed that 28 percent of the state's drivers are uninsured (in Los Angeles County the figure was 37 percent) and that California drivers paid an extra $1 billion in premiums as a result (Miller, 1998).

recipients, reported in 2001 that over 85 percent of its loans had gone to vehicle purchases. Moreover, early evaluations of the program show that participants average as much as a 20-percent increase in monthly income once the loan is received—testament again to the economic impact of personal vehicles.

2.7 Conclusions

Within the body of research that examines transportation's relationship to poverty, there is little question that physical accessibility to jobs is a major barrier to work. The idea of spatial mismatch, for all the permutations it has undergone and controversy it has engendered, remains one that is largely considered valid. Not just for the poor, but for the nation at large, where we work is often not near where we live. The difference is that for the non-poor, getting back and forth between the two places is often much easier. This idea, called modal mismatch, is increasingly dominating the literature on transportation, poverty and employment.

It is important to understand this, because with this understanding comes the realization that transportation assaults the symptom, rather than the source, of distance-based barriers to work. Spatial mismatch and its related barriers are land use problems that transportation can mitigate, but not truly solve. Land use problems are solved by land use policies. Transportation policies, however, can skirt land use governance, and in so doing offer speedier remedies, which in an era of time-limited welfare is no small advantage.

The research on transportation and employment is also dominated by examinations of the private automobile, and very often yields results indicating that the private automobile is pivotal in the economic fortunes of the poor. Mass transit is seen as less so. This, too, is related to distance-based barriers, and the land-use decisions that create them. The same policies that helped create the spatial mismatch have also helped marginalize public transportation, and assaulted its utility. In such an atmosphere it seems unrealistic and perhaps unfair to ask that mass transit fill gaps in welfare reform. As Taylor and Wachs (1998) point out, transit and the urban poor suffer from the same affliction, which is too many years of an urban policy that was harmful to urban areas. The two problems are both "damaged parts of our deeply flawed urban system," and as such one is unlikely to solve the other.

One must be careful, however, not to paint an overly bleak picture. Recognizing the limitations that American urban form places on transit's role in poverty reduction also allows us to better understand those areas where transit is likely to be effective. Demand-responsive transit, for instance, shows early promise, and has to its advantage a built-in recognition of the realities of urban and suburban growth. Although at this point it seems quite expensive per ride, it requires fewer capital outlays than bus or rail, and its flexibility allows its vehicles to be shifted easily from one area of a city to another. This is an important consideration, since workers, after being employed for some time, may very well buy cars, thus reducing the demand for demand-responsive service.

Transit can also make a contribution by reorienting itself to better serve inner-city populations. There is ample opportunity for improvement in intra-urban mobility. Improved intra-urban transit will also allow for better access to those jobs that remain in metropolitan areas, and shorten commute times that are now prohibitively long. If transit cannot help low-income workers overcome the spatial mismatch, it can certainly ameliorate the modal mismatch, and ease the burden placed on those who cannot afford cars.

The final lessons to be derived from the current research on welfare and transportation are that transportation is but one component in a large and vexing problem, and commuting is but one aspect of transportation. The fact that the poor tend not to get to work by transit does not mean transit is something they do not use. Life, for the poor as for anyone else, involves more than getting to work and back, and the role of transit, though small in commuting, can be large and important in many non-commute functions. Within efforts to secure funds explicitly available for commuting, this advice is obviously of limited utility, but in any larger context it is undeniably important.

On the same lines, seamless access to jobs will be meaningless without adequate education and training, and neither education nor transportation will matter if taking a job forces young women to leave their children unsupervised. Transportation will never be a panacea, and any effort at poverty reduction must by necessity factor in the multiple concerns of those it seeks to help. But transportation policy can, if crafted wisely, greatly improve the plight of welfare recipients, and help them move beyond their current constraints.

3. Transportation and Low-Income Adults in California

3.1 Introduction

This chapter explores the demographic, economic, and transportation characteristics of low-income workers in California in comparison to all working-age adults. Since some of the policy and funding initiatives have been as a response to welfare reform, we examine the characteristics of welfare recipients. However, while recipients represent a large and vulnerable population, in absolute numbers they are dwarfed by the larger population living in poverty. Moreover, welfare recipients are substantially different from the overall population of the poor. Therefore, we also examine the characteristics of adults who are 150 percent of poverty and, in some cases, adults who have incomes below the poverty line.

The key findings include the following:

- Most welfare recipients and low-income residents in California live in Los Angeles County; however, welfare usage and poverty rates are highest in rural and agricultural counties;
- Most welfare recipients are single parents, female, relatively young, and non-white. Approximately two-thirds have worked within the last year;
- Low-income adults are disproportionately Hispanic, Spanish-speakers, and unemployed;
- The median income of employed welfare recipients is comparable to that of poor adults but significantly less than all adults and adults 150% of poverty;
- Most welfare recipients and other low-income workers commute by car, own personal vehicles, and commute less than 15 minutes; and
- A higher percentage of low-income commuters travel during off-peak hours than all commuters.

3.2 Low-Income Adults in California

California is the most populous state in the union, with a diverse population and economic base. Although the California economy was extremely strong during the late 1990s, a substantial number of residents remained poor. The state has, by far, the largest population of welfare recipients in the country. Approximately, one-quarter of all families receiving Temporary Assistance to Need Families (TANF) live in California (U.S. Department of Health and Human Services, 2000a). California's percentage of TANF families has increased over time, rising from 19 percent in 1995 to 22 percent in 2001 (U.S. Department of Health and Human Services, 2000a). Los Angeles County

alone contains more recipients than all but two states, New York and, of course, California (U.S. Department of Health and Human Services, 2000a; California Department of Social Services, various dates).

In addition to welfare recipients there are a substantial number of families living in poverty. We identified 638,138 working-age adults (age 18–64) who received assistance at some time during the year 2000, representing approximately three percent of all working-age adults in the state. In contrast, data from the 2000 census show that approximately 2.7 million adults are poor with incomes below the federally designated poverty line, and almost eight million Californians (including children and the elderly) live in families with incomes below 150 percent of the poverty line.[9]

Figure 3.1 shows the welfare caseload trend from 1995 to 2001 for California (on the left axis) and the U.S. (on the right axis). Although the number of cases has declined dramatically since the passage of welfare reform, the downward trend had already begun in 1995, before the reforms were enacted and implemented. This finding suggests that the strength of the economy has a significant impact on the welfare rolls (Blank and Wallace, 1999; Council of Economic Advisors, 1997; Ziliak et al., 2000). In 2000/2001, during which the economy stagnated, the rate of decline slowed so that there was almost no further decrease in the welfare caseload. Therefore, a sustained economic downturn combined with existing time limits on the receipt of welfare benefits are likely to result in increased poverty.

Despite declining welfare caseloads, poverty continues to be a problem. In California, the growth in the population of working-poor adults far outpaced the overall growth in the working-age population. During the period between 1990 and 2000, the number of working-age adults in poverty increased by 32 percent, compared to the total working-age population, which grew by only 12 percent. The increase in working-age poverty occurred fastest in non-urban counties, where the percentage increase exceeded 40 percent as shown in Table 3.1.

[9] We have used the most recent data available for the comparisons in this chapter. Due to the release schedule of the 2000 census, some statistics reported here (particularly those relying on Public Use Microdata Sample of the U.S. Census) are from 1990. The source dates of all statistics used in this chapter are clearly noted.

Figure 3.1 Welfare Caseloads from 1995 to 2001 – California and the U.S.

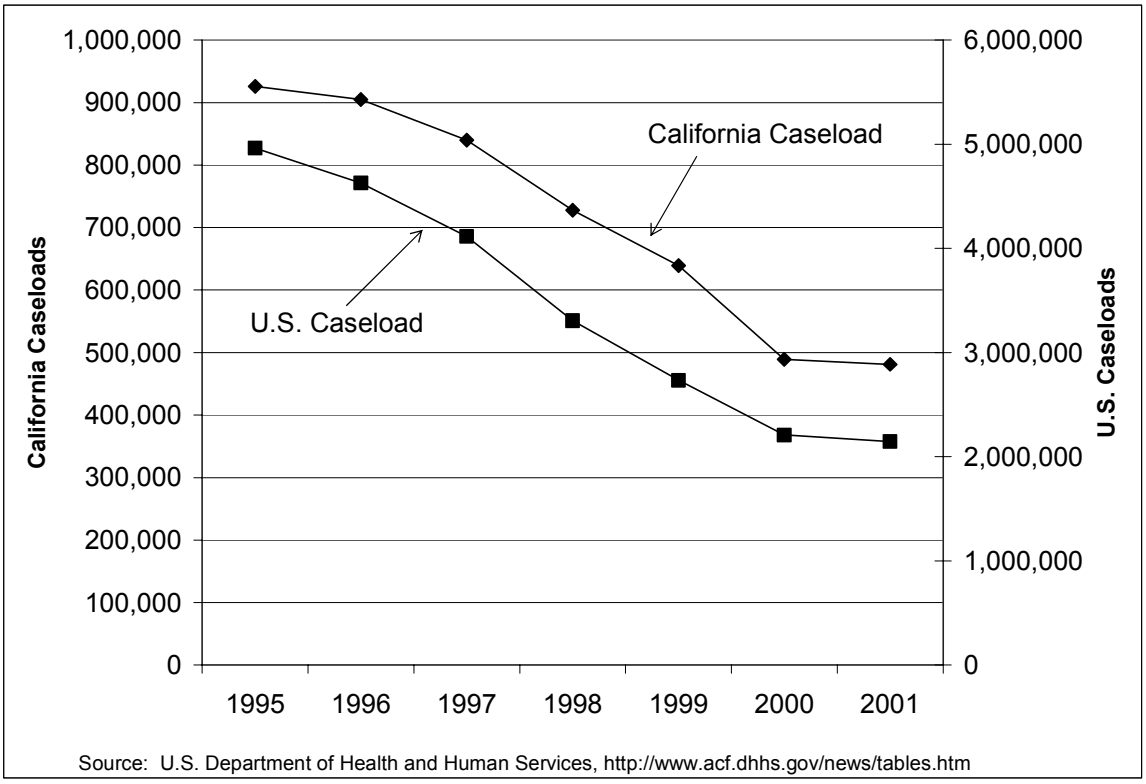
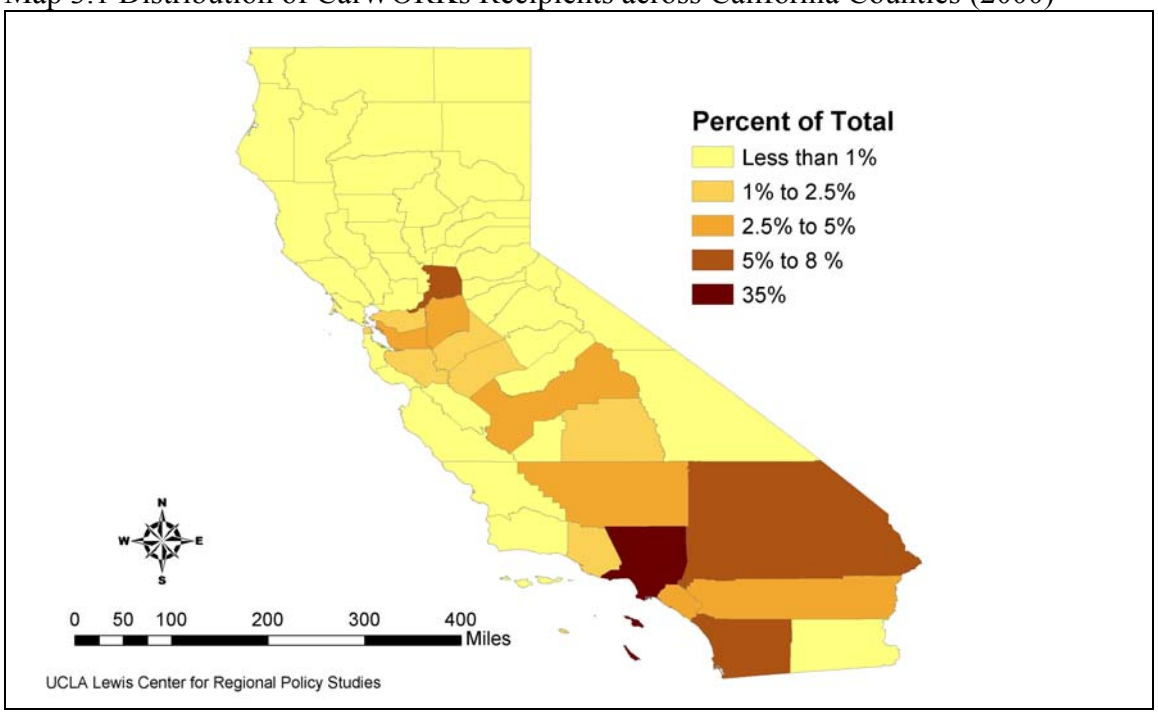


Table 3.1 Growth in Working-Age Poverty, Distribution by County Type

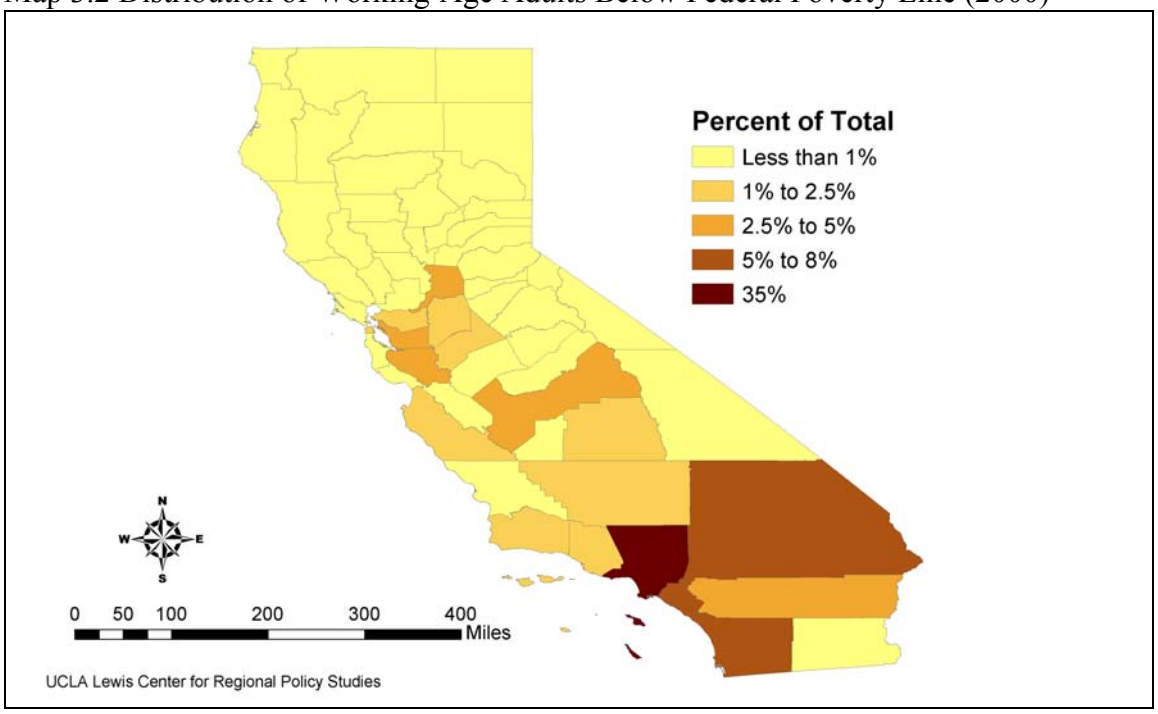
	Working-Age Adults at or below Poverty Line 1990	**Working-Age Adults at or below Poverty Line 2000**	**% increase**
California	2,019,921	2,668,619	32%
Urban Counties	1,449,099	1,870,362	29%
Mixed Counties	309,375	431,358	39%
Rural Counties	35,105	49,818	42%
Agricultural Counties	225,290	317,081	41%
Source: 1990 and 2000 Censuses.			

As Maps 3.1 and 3.2 show, most welfare recipients and low-income adults live in Southern California with the highest percentage in Los Angeles. But welfare usage and poverty rates tell another story. As the Maps 3.3 and 3.4 show, welfare usage rates are high in many of the rural and agricultural counties where employment is seasonal, and unemployment and poverty rates are high.

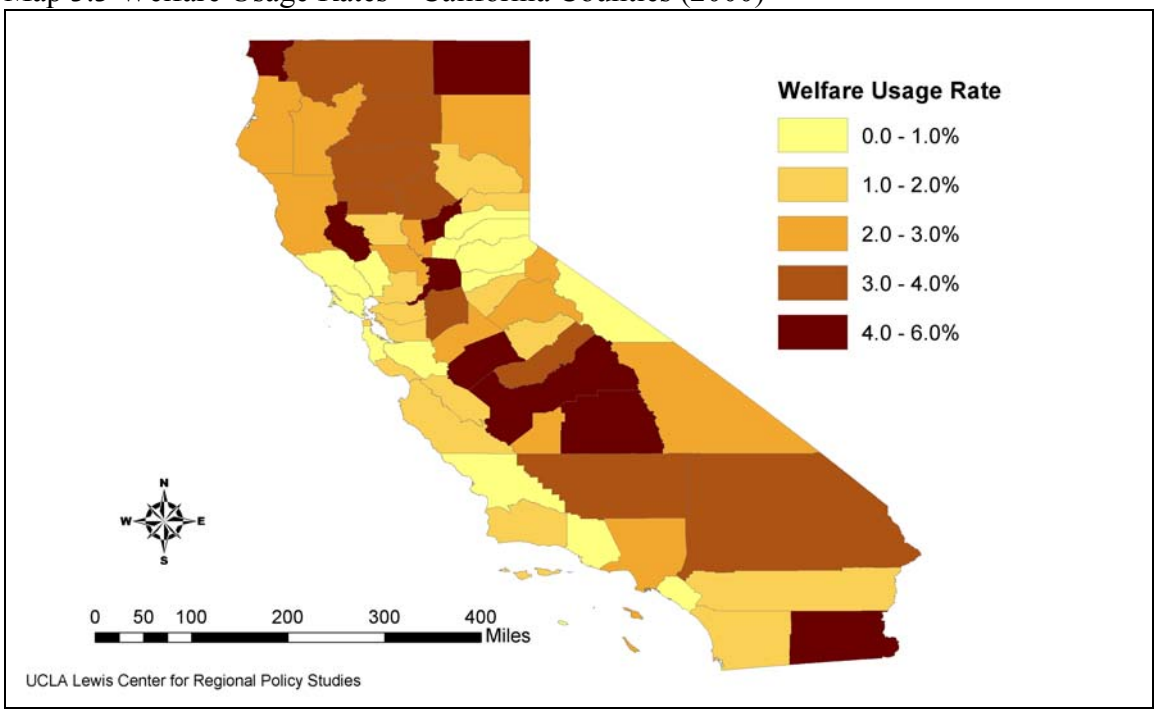
Map 3.1 Distribution of CalWORKs Recipients across California Counties (2000)



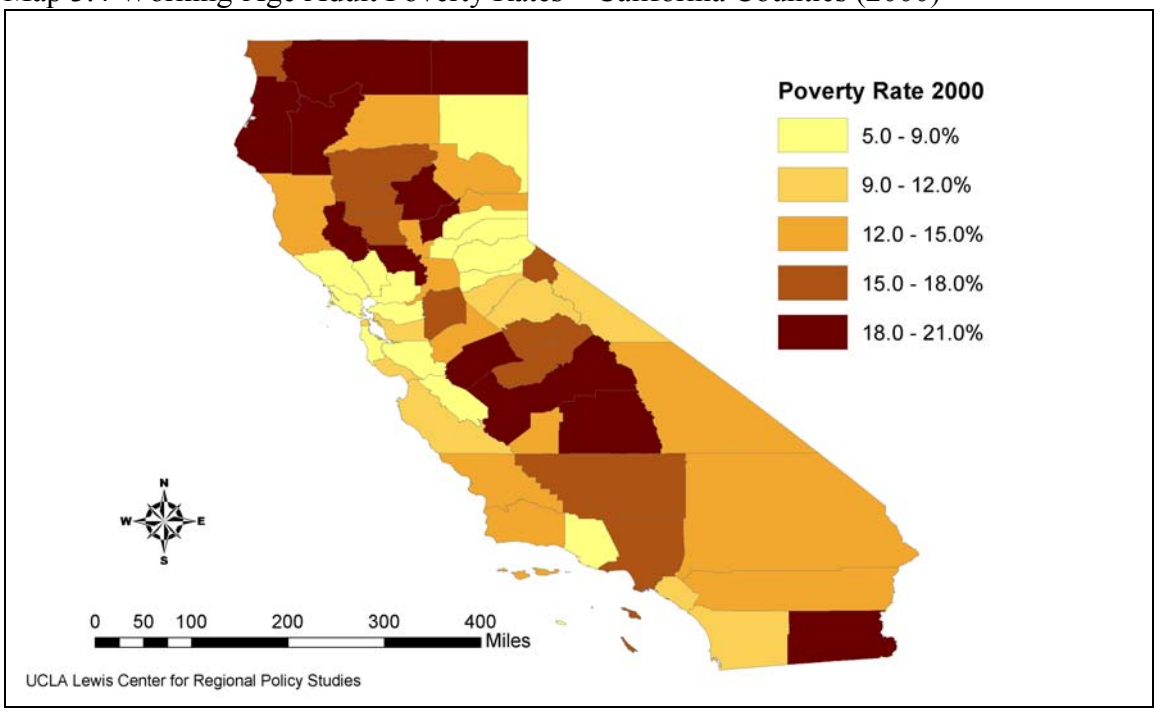
Map 3.2 Distribution of Working-Age Adults Below Federal Poverty Line (2000)



Map 3.3 Welfare Usage Rates – California Counties (2000)



Map 3.4 Working-Age Adult Poverty Rates – California Counties (2000)



As Table 3.2 shows, over two thirds of all CalWORKs participants in California live in urban counties compared to three quarters of all working-age adults. Sixteen percent live in agricultural counties, a much higher proportion compared to working-age adults generally. Two percent live in rural, mountain counties. The remaining 14 percent live in counties designated as mixed.[10] Not surprisingly, the distribution of welfare recipients across county types more closely matches the distribution of poor, working-age adults than the total working-age population.

Table 3.2 Population Distribution by County Type

	Adult CalWORKs Recipients (2000)	Working-Age Adults Below Poverty (2000)	All Working-Age Adults (2000)
Total Population	638,138	2,668,619	21,063,391
County Type			
Urban Counties	68%	70%	73%
Mixed Counties	14%	16%	16%
Rural Counties	2%	2%	2%
Agricultural Counties	16%	12%	9%
Source: MEDS; 2000 Census			

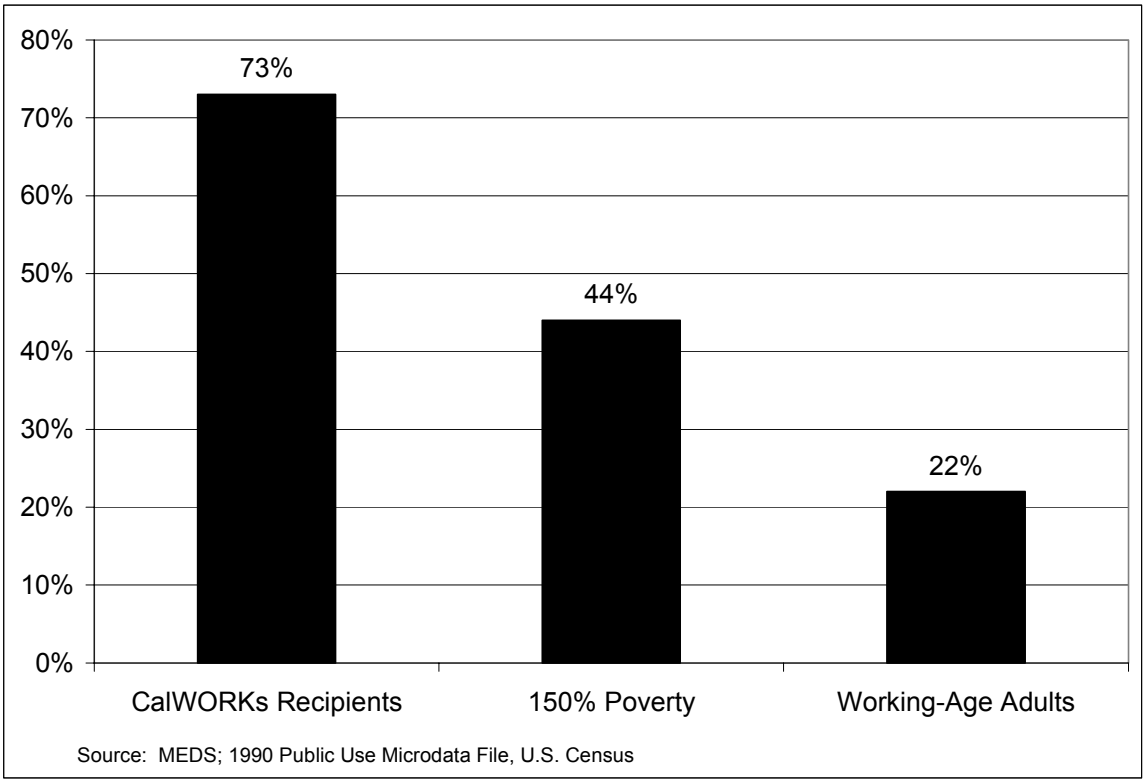
Demographic Characteristics

Welfare recipients predominantly live in single-parent households. Three-quarters of all cases consist of single-parent adults. Compared to the general population, just less than one-half of very low-income families are single-parent households as are slightly more than half of all low-income families.[11] In contrast 78 percent of all families include two-parents. (See Figure 3.2 below.)

Because of eligibility requirements for participation in the CalWORKs program, all welfare cases have children. Therefore, welfare recipients are concerned about their own transportation as well as the transportation related to their children. Additionally, 76 percent of adult welfare recipients are women (with children). However, the sex distribution of the low-income population as a whole is much more evenly divided. In 2000, only 55 percent of the poor, working-age population was female.

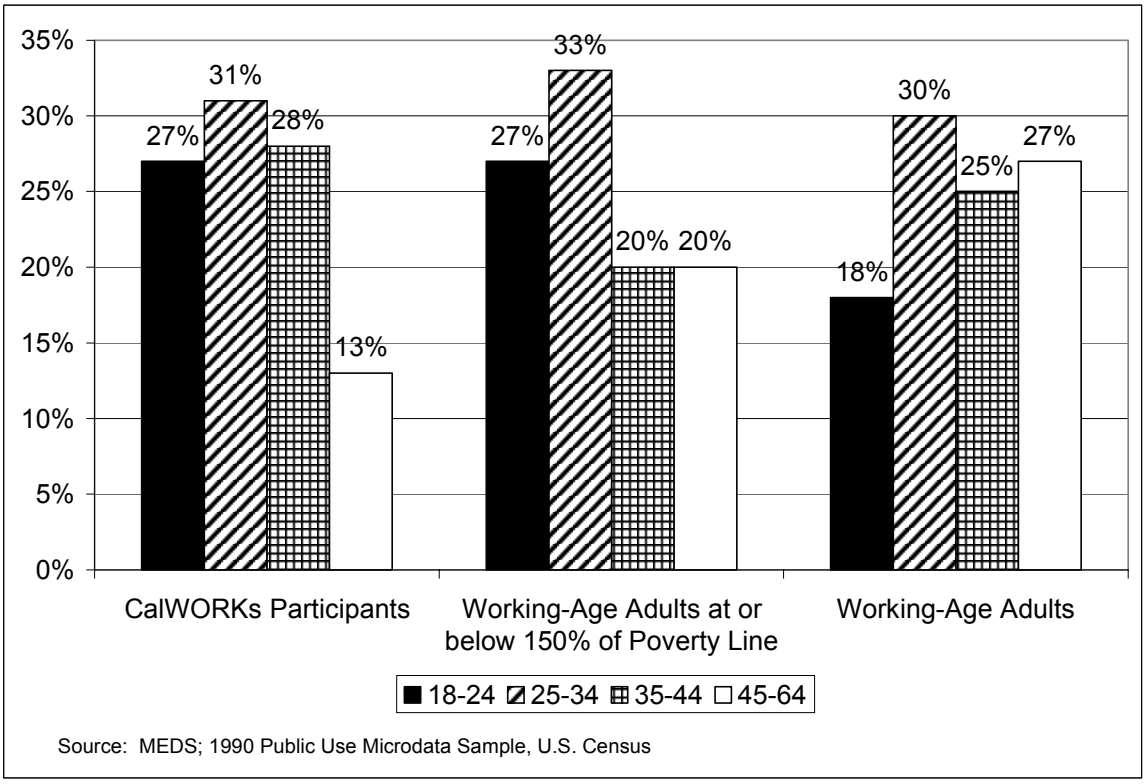
[10] See Map 1.1 in Section 1 for a map of the county types in California.
[11] Estimates obtained by selecting those individuals from the 1990 Public Use Microdata Sample of the U.S. Census who reported having children. Those who reported their marital status as married and not as separated, were counted as two-parent families; all others were treated as single parents.

Figure 3.2 Single-Parent Households, CalWORKs Participants, Low-Income Persons, and Working-Age Adults in California



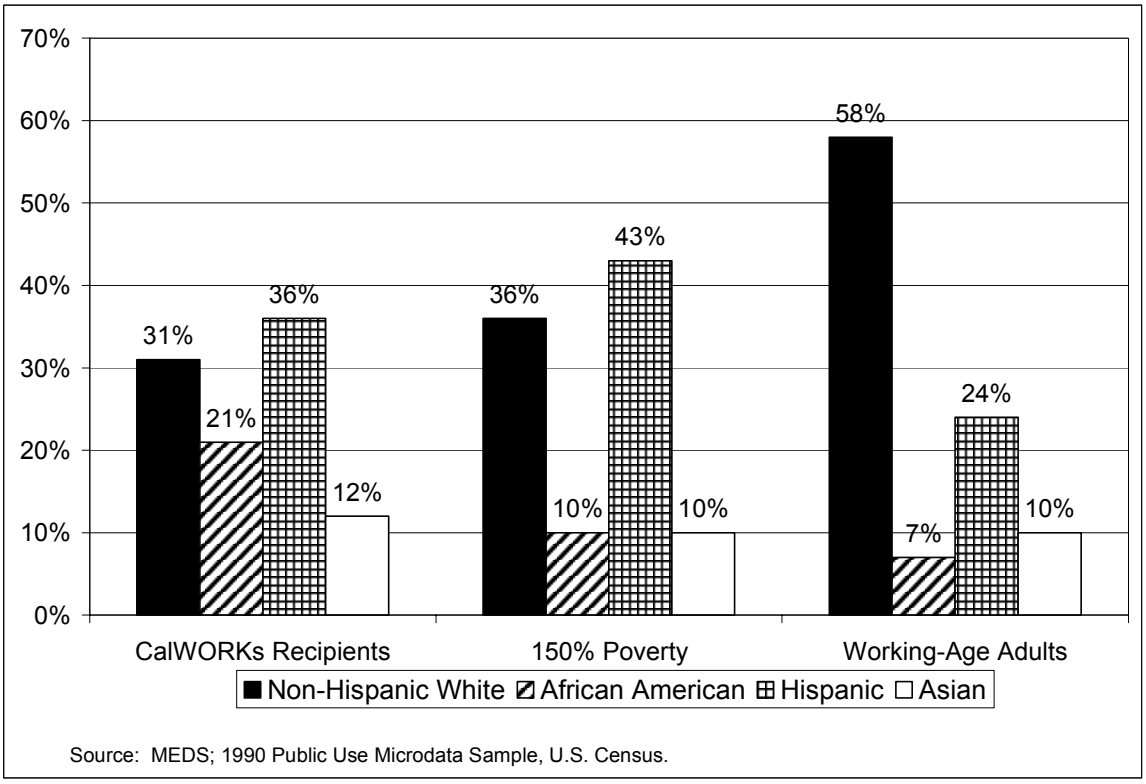
The average CalWORKs participant is 33 years old, roughly the same average age as the low-income population but slightly younger than all working-age adults. As depicted in Figure 3.3, the age profile of CalWORKs participants is quite similar to other low-income adults, although they are somewhat overrepresented in the 36 to 45 year age group and underrepresented in the 45 to 64 year age group. Similarly, the poor tend to be younger than the overall population. Approximately, one-third of all low-income adults, whether receiving assistance or not, are under 25 years of age compared to just 21 percent of all adults. Although this report focuses on the transportation needs of low-income, working-age adults, a balanced transportation policy must recognize the specific needs of both the elderly and the very young. Both of these population groups are likely to have mobility limitations that cannot be met with private automobiles.

Figure 3.3 Age Profile of CalWORKs Participants, Low-Income Persons, and Working-Age Adults in California



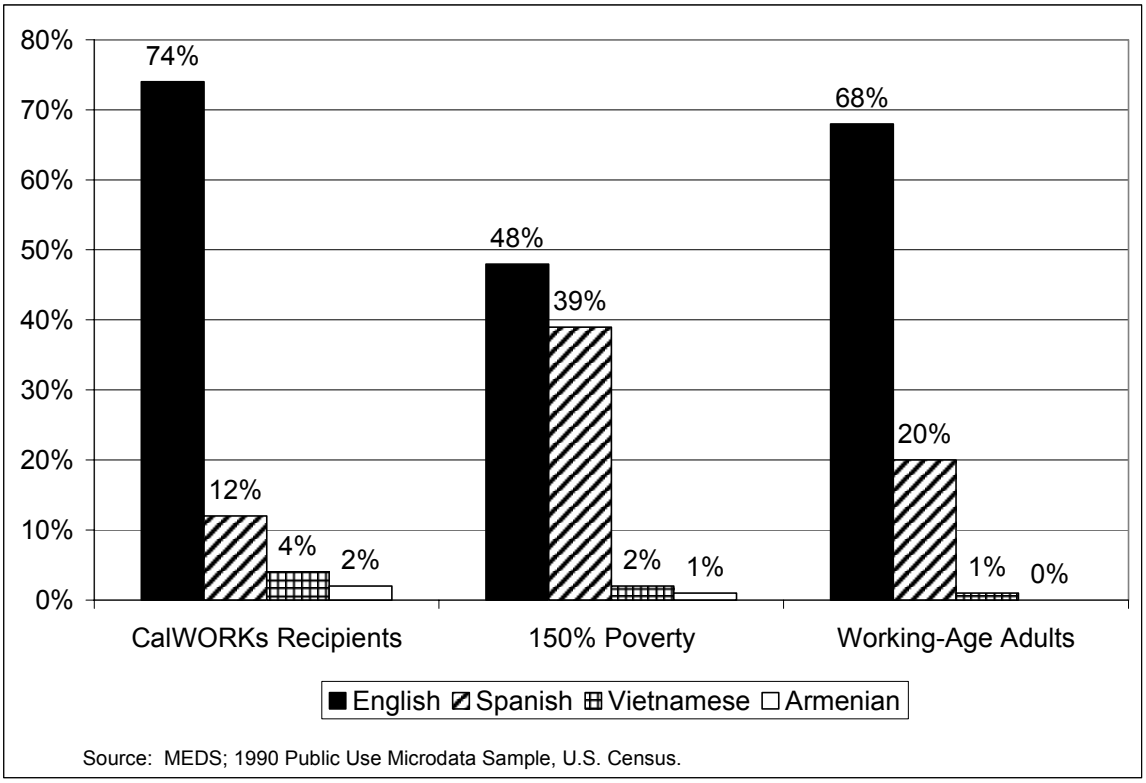
Non-Hispanic Whites are a minority of welfare recipients in the state, comprising only 31 percent of all recipients. The remainder of the population includes 21 percent African Americans, 36 percent Hispanics, and 12 percent Asian/Pacific Islanders. African Americans participate in CalWORKs at a rate nearly twice that of their proportion among low-income persons and three times their proportion in the general population. The percentage of Hispanics among CalWORKs participants is less than their proportion among all low-income persons, but higher than among all adults. This is likely due to the large number of recent Hispanic immigrants many of whom are non-citizens and not typically eligible for public assistance. Additionally, they may face language and other barriers to program participation. Asian/Pacific Islanders comprise approximately the same proportion of CalWORKs recipients as they do of low-income adults and all adults.

Figure 3.4 Racial Characteristics of CalWORKs Participants, 150% of Poverty and Working-Age Adults in California



Nearly three-quarters of all CalWORKs participants speak English and 12 percent speak Spanish (see Figure 3.5). The next largest language groups are Vietnamese, Armenian, Russian, and Cambodian. Compared to welfare recipients, low-income adults and all adults are more likely to report speaking Spanish. Numerous other languages are spoken in California and may be locally important, even if they do not appear in the top five languages in the state. Linguistic isolation can be a significant barrier to employment (Blumenberg, 2002). Therefore, transportation programs that provide services in multiple languages may induce increased ridership among minority groups.

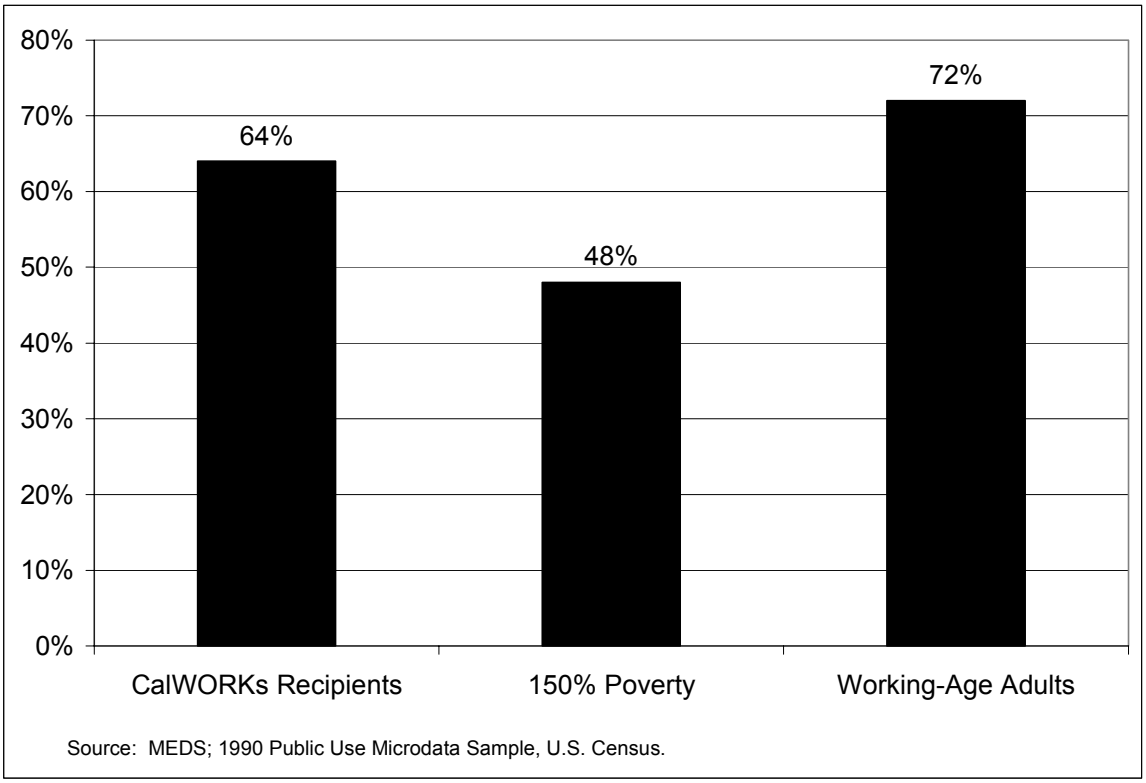
Figure 3.5 Major Languages Spoken by CalWORKs Participants, 150% Poverty, and Working-Age Adults in California



Employment Characteristics

As shown in Figure 3.6, approximately 64 percent of CalWORKs participants are employed. This figure is higher than the employment rate of the adult population 150% of poverty (48%) and slightly lower than all working-age adults (72%). The relatively high employment rates of welfare recipients may seem surprising, since recipients typically face numerous barriers to employment. However, these employment rates may be due to a combination of factors. First, welfare reforms mandate employment-related activities for most participants. Secondly, the employment rates of welfare recipients were produced using a liberal definition of employment. Welfare recipients were considered employed if they had any earnings (i.e., earning of $1 or more) in the year 2000. Finally, it is important to note that the seemingly high rate of employment reveals nothing about the quality of jobs held by recipients. Studies show that welfare recipients tend to find employment in occupations that pay low wages and frequently have few employment benefits (Loprest, 1999, 2001).

Figure 3.6 Employment Rates of CalWORKs Participants, Low-Income Adults, and Working-Age Adults in California



As Table 3.3 shows, the overall median income of all CalWORKs participants was $1,407, a figure that includes a significant number of individuals who had no reported income. Among welfare recipients who reported some income in 2000, median income was $5,324. This figure is similar to the median income of the poor ($5,277) but significantly lower than the median income of working-age adults 150% of poverty ($8,332). The 1990 median income (adjusted to 2000 dollars) for all working-age adults was $20,831 and for those with reported income the figure was $29,163.[12] From these figures, it is clear that even a few dollars a day for bus fares can present a substantial burden to people in the lowest income groups.

[12] The 1990 census reports earnings from the previous year, i.e., 1989.

Table 3.3 Median Income of CalWORKs Participants and Working-Age Adults, California

	CalWORKs Participants	Working-Age Adults at or Below Poverty Line	Working-Age Adults at or below 150% of Poverty Line	All Working-Age Adults
All Persons	$1,407	$2,777	$5,669	$20,831
Employed Persons	$5,324	$5,277	$8,332	$29,163
Source: MEDS; 1990 U.S. Census Public Use Microdata Sample (PUMS). (Note: 1989 income figures are adjusted to 2000 dollars.)				

3.3 Transportation and the Poor

There is no comprehensive source of information providing in-depth, statewide transportation characteristics of low-income workers. Three county-wide surveys of CalWORKs participants have been conducted in Los Angeles, Alameda, and Fresno counties, which have included detailed transportation questions (Blumenberg, 2002; County of Los Angeles, 2000; Green et al., 2000). There have also been a few statewide surveys that have gathered limited transportation information, such as the annual CalWORKs quality-control survey (known as the Q5) administered by the California Department of Social Services (CDSS) and the 1996 Job Readiness Survey also conducted by the CDSS. (See Appendix A for a description of some of these data). To a limited extent, national data such as the Nationwide Personal Transportation Survey (NPTS) and the decennial census can also be used to understand the transportation characteristics of low-income workers. Therefore, the following data on the transportation characteristics of the poor are drawn from multiple sources.

Sixty-three percent of the CalWORKs participants included in the Job Readiness survey reported having a driver's license. As shown in Figure 3.7, among employed participants, 65 percent of all their trips were in private vehicles while 27 percent of trips were by transit (both bus and rail) and 7 percent walked or used other modes. By comparison, less than 5 percent of all adults and 12 percent of low-income adults commute by public transit. Less than one percent of all work trips are by fixed rail transit, regardless of income.

Fifty-eight percent of CalWORKs participants report their usual mode of transportation as either their own or their spouse's vehicle. Usual mode is not a precise proxy for household vehicle ownership since auto owners may not consider personal vehicles their usual mode of travel. As Table 3.4 shows, 81 percent of the poor, 83 percent of those 150% of poverty, and 95 percent of all adults report owning vehicles.

Fewer low-income workers commute during the morning peak period (6-9 A.M.) than workers in general and, therefore, are more likely to be traveling at off-peak hours when transit service tends to be less available. On average, commutes tend to be short,

less than 15-minutes, and roughly 80 percent of commutes are less than a half-hour, irrespective of income. As shown in Figure 3.8 , the commutes of adults 150% of poverty tend to be slightly shorter than those of all commuters and the difference is statistically significant. However, despite these differences in the travel behavior and transportation patterns across income groups, the similarities are striking.

Figure 3.7 Transportation Characteristics: All Trips by Mode

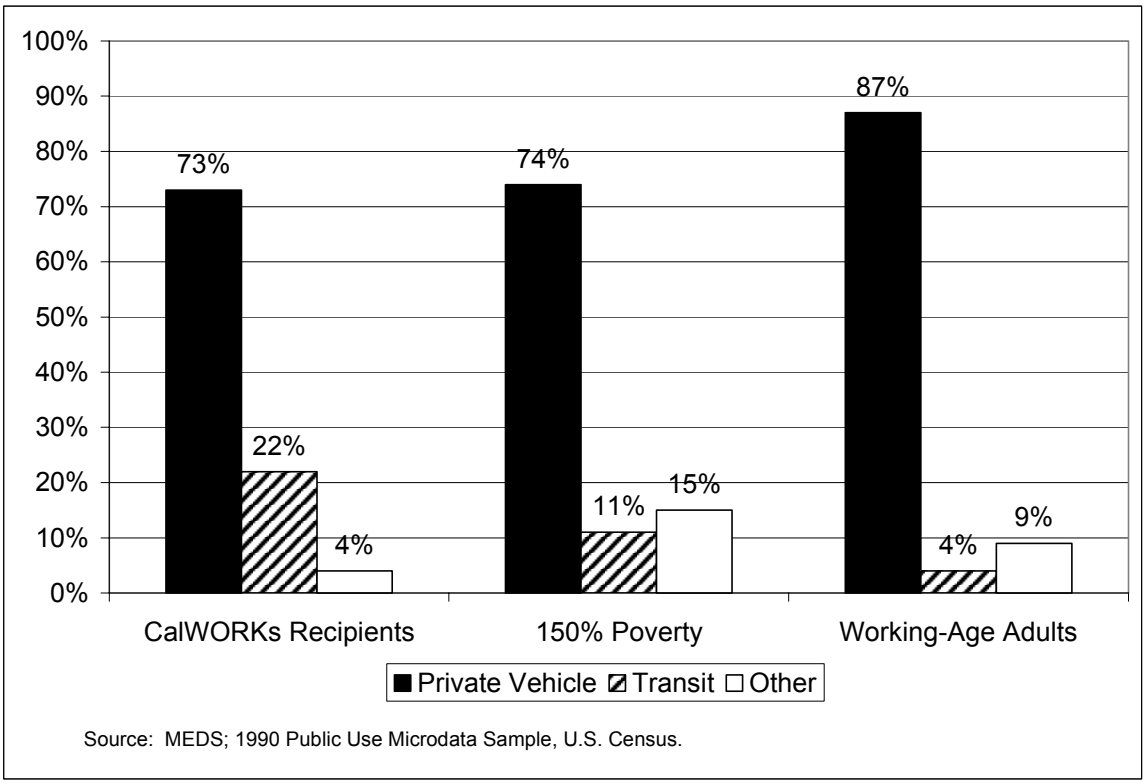
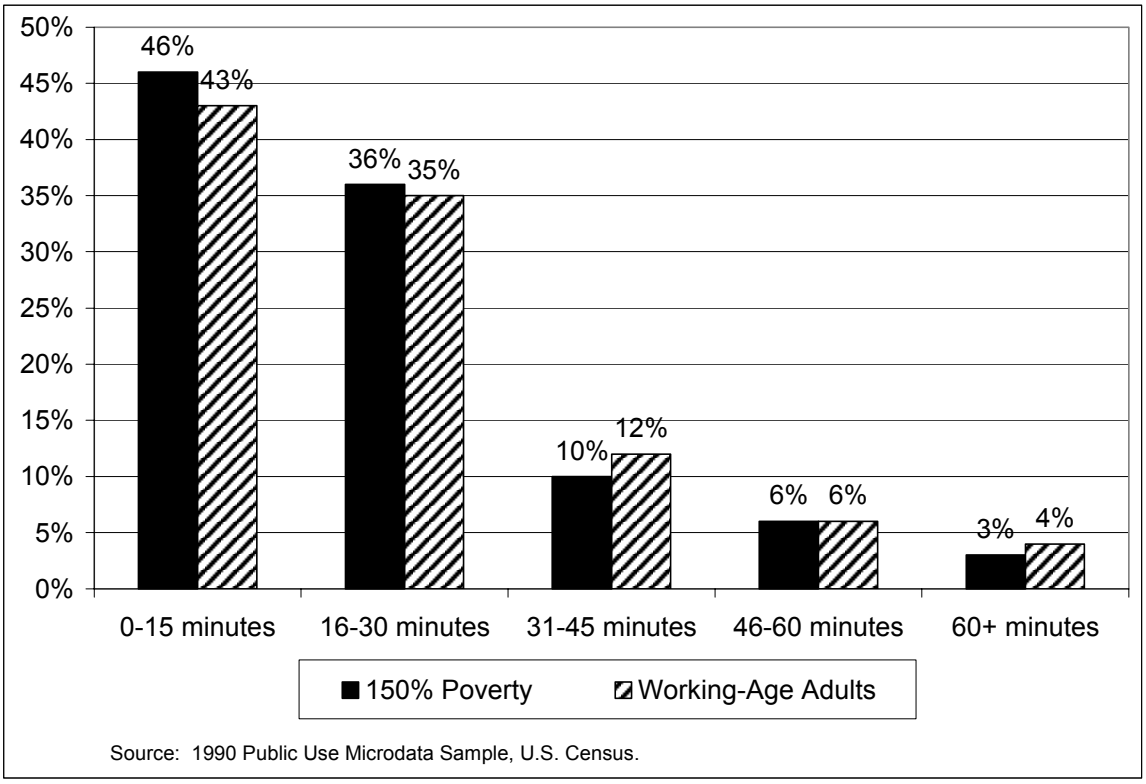


Table 3.4 Selected Transportation Characteristics of CalWORKs Participants, Low-Income Adults, and Working-Age Adults in California

	CalWORKs Participants	Working-Age Adults at or Below Poverty Line	Working-Age Adults at or Below 150% of Poverty Line	Working-Age Adults
Vehicle in Household	58%	81%	83%	95%
Leave for Work During Peak Period (6-9 A.M.)	n.a.	58%	59%	67%
Source: Job Readiness Survey (1996); 1990 Public Use Microdata Sample, U.S. Census.				

Figure 3.8 Average Travel Time of Low-Income and Working-Age Adults in California



4. Federal Programs to Meet the Transportation Needs of Welfare Recipients and Low-Wage Workers

This chapter describes the transportation funding and planning programs for welfare recipients and other low-income workers – the Temporary Assistance to Needy Families Program, the Federal Job Access Program, the Welfare-to-Work Grants Program, and the regional transportation planning process. These programs provide the preponderance of funding for transportation programs for low-income workers and welfare recipients. The review will include (a) program descriptions, (b) a description of how the funds have been allocated, and (c) a description of the specific types of programs funded.

4.1 Temporary Assistance to Needy Families (TANF) and CalWORKs

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 created the Temporary Assistance to Needy Families (TANF) program, administered by the U.S. Department of Health and Human Services, Administration for Children and Families. TANF provides assistance and work opportunities to needy families by granting federal block grants to states and giving them wide flexibility to develop and implement their own welfare programs.

TANF block grants to States totaled $16.5 billion annually through FY 2002.[13] When TANF funds are used welfare recipients are subject to work and participation requirements, a five-year time limit on federal assistance, data reporting, and other prohibitions. TANF-eligible families can receive transportation resources in two ways. Some benefits and services funded under TANF are referred to as "assistance." More specifically, this refers to benefits directed at ongoing basic needs. Under this definition, transportation for participating in community service, education, or training qualifies as assistance for family members who are not employed. There is a 60-month federal lifetime limit on receiving such TANF services and benefits.

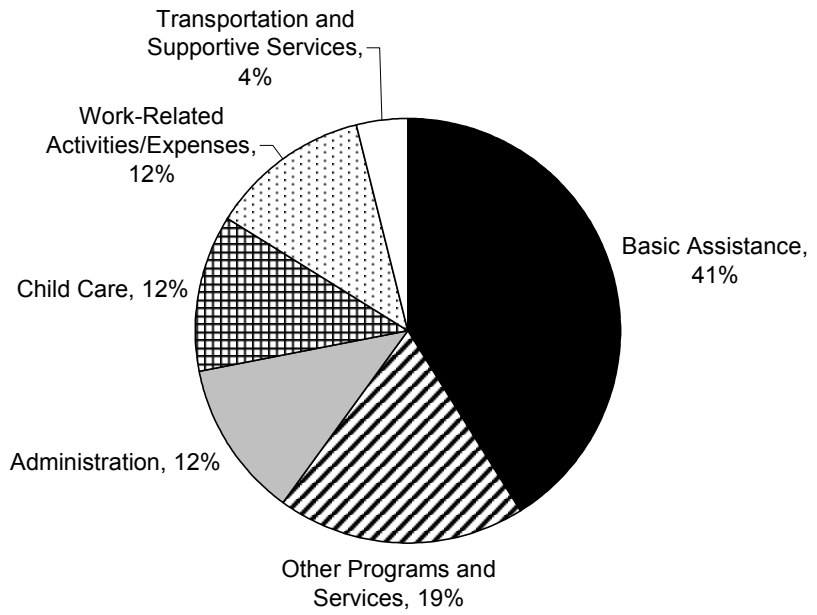
Also, transportation can be a supportive service classified as "non-assistance." This includes transportation services provided to employed families as nonrecurring, short-term benefits. In this regard, transportation services usually support families participating in welfare-to-work activities and/or training.[14] Examples of this type of service include transportation offered during job search or to a recently employed family during a short period of unemployment (Greenberg, 2001). These services assist families in moving from welfare into the labor market.

[13]This amount is based on 1994 welfare caseloads and funding levels and is not adjusted for inflation or increases in caseloads.

[14]U.S. Department of Labor Directive "Use of TANF, WtW, and Job Access Funds for Transportation," 2001. Accessed at: http://wtw.doleta.gov/documents/tegltein/10-98att.htm.

States—and in California, counties—have considerable flexibility in how they use these TANF funds. And while TANF funds can be used to provide necessary transportation services to TANF-eligible families, it is only one of many services that social service agencies provide to their recipients. Figure 4.1 shows how TANF funds were used across the US in FY 2000. Most federal TANF funds go to cash assistance and childcare. Only 4 percent of federal expenditures are spent on transportation services.

Figure 4.1 Federal TANF Spending as Percent of Total Expenditures – FY 2000



U.S. Department of Health and Human Services (2000). TANF Program Expenditures in FY 2000 through the 4th Quarter: Temporary Assistance to Needy Families (TANF). Administration for Children and Families. Office of Financial Services. Available: http://www.acf.dhhs.gov/programs/ofs/data/q400/index.htm

In response to federal welfare reform, California enacted the California Work Opportunities and Responsibilities to Kids (CalWORKs) program to implement the TANF program. Effective January 1, 1998, the implementation of CalWORKs marked a major shift in welfare policy by emphasizing moving welfare recipients into the workplace and imposing strict time limits on how long a person may receive cash assistance. In order to receive assistance, non-exempt participants in CalWORKs must participate in welfare-to-work activities that will enable them to become and remain employed. Funds are directly allocated to counties to provide assistance to participants as well as services outlined in each county's CalWORKs plans.

Table 4.1 shows the total federal awards, transfers and expenditures for California for fiscal years 1997 to 4th quarter fiscal year 2000.[15] The data shows that in California approximately 3.4 percent of the total federal and state TANF funds available were spent

[15]These figures, however, do not automatically represent the exact amount available to be spent each year. States can carry forward unobligated TANF funds for use in future years. California has spent 96.1 percent of funds received since FY 1997 (Carroll, 2001).

on transportation and supportive services and non-assistance-related transportation programs compared to 2.4 percent for the U.S. In California, almost all of the federal transportation dollars are used for transportation-related assistance and only 6 percent is allocated to non-assistance transportation programs. The distribution between these two types of programs is different nationally where 19 percent of federal TANF transportation funds are allocated to non-assistance transportation programs.

Table 4.1 Federal and State TANF Expenditures, FY 2000

	United States	California
Total Federal and State funds expended	$23.6 billion	$6.2 billion
Federal transportation and supportive services	$373.7 million	$141.3 million
Federal transportation (non-assistance)	$85.8 million	$8.7 million
Transportation and supportive services	81%	94%
Transportation (non-assistance)	19%	6%
Available at: http://www.acf.dhhs.gov/programs/ofs/data/q400/index.htm (Tables A and F) *This source does not report state non-assistance state transportation expenditures.		

4.2 The Job Access and Reverse Commute (JARC) Program

The Job Access and Reverse Commute (JARC) program, created by Section 3037 of the Transportation Equity Act of the 21st Century (TEA-21), is operated by the Federal Transit Administration. The JARC program is intended to help agencies develop new transportation services to connect welfare recipients and other low-income persons to jobs and other employment-related services JARC grants were authorized at $150 million annually for fiscal years 1999 through 2003. Guaranteed funding began at $50 million, increasing $25 million each fiscal year. The program requirements state that as much as $10 million per year may be used specifically for reverse commute projects.

Job Access projects develop new or expanded transportation services, such as shuttles, vanpools, new bus routes, connector services to mass transit, and guaranteed ride home programs. Reverse commute projects, a particular goal in the JARC program, promote transportation services to suburban employment centers from urban, rural, and other suburban locations.

According to the program's design, all projects funded under JARC were to be the result of a collaborative planning process among states and metropolitan planning organizations (MPOs), transportation providers, agencies administering TANF (state and county welfare agencies) and Welfare-to-Work funds, human services agencies, public housing authorities, childcare organizations, employers, states and affected communities and other stakeholders.

JARC funds must be used to support new and/or expanded transportation services and cannot be used for construction or to subsidize existing operating costs. They must not supplant state transportation expenditures; in other words, the JARC program was not intended as a new source of funding for existing transit programs. Most benefits derived

from using JARC funds are supposed to go to current and former TANF recipients, non-custodial parents of children receiving TANF, and low-income individuals at risk of qualifying for TANF. And perhaps most importantly, the services provided from JARC funds are supposed to enable TANF recipients to get and keep work.[16]

Originally, JARC funds were awarded through a competitive grant program administered by the FTA. In urbanized areas with a population of 200,000 or more, MPOs select the applicant(s). In small urbanized areas where the population is under 200,000 and in non-urbanized, rural areas, states or state transportation departments select the applicant(s). Tribal governments must go through the state process but, once selected, can choose to be sub-recipients of the state or apply directly to the FTA.

The JARC program mandates a 50-percent match from agencies; this match is designed to provide incentives for pooling revenues for local matches. Funds from other Federal programs (with the exception of other Department of Transportation funds) can be used as part of this local match. Matching funds may come from programs such as HOPE IV grants administered by the U.S. Department of Housing and Urban Development, Social Service Block Grants and TANF funds administered by the U.S. Department of Health and Human Services, and Welfare-to-Work grant funds administered by the U.S. Department of Labor.

In fiscal years 1999 and 2000, the first year of the program, all projects were selected competitively, based on criteria that emphasized interagency coordination, local financial sustainability, and targeting of welfare recipients. (See Appendix B.) Applications were funded annually, so that multi-year projects would have to reapply for funding the following year. Additionally, continuing programs were not guaranteed funding. In the following year, however, projects funded competitively, shown in Appendix C, were selected from unfunded or under-funded projects submitted to the FTA in FY 2000.[17]

Beginning in FY 2000, Congress began earmarking funds to specific projects in addition to this competitive process. This trend increased substantially in following years, as indicated in Table 4.2.

Table 4.2 JARC Grants and Earmarks for the U.S. (Values in millions of dollars)

	Total Funding	Earmark	%
1999	$50	$0	0%
2000	75	50	67
2001	100	75	75
2002	125	109	88
Source: Caltrans, Division of Mass Transportation, Office of Job Access			

[16]As defined by Section 407(d) of the Social Security Act.
[17]Financial limitations in FY 2000 prevented the FTA from fully funding a number of qualified projects in that fiscal year.

One reason given for the earmarking was the inconvenience of applying year-after-year for multi-year projects. But the trend toward earmarking returned control to the federal government over programs, so that the U.S. General Accounting Office criticized earmarking. In response, the FTA outlined changes in application and selection procedures for the last two years of the JARC program. Rather than solicit application proposals for each year individually, the applications have been solicited for both years at the same time, and the agency has begun to emphasize funding for continuing programs originally funded under the JARC program.

Within California, 18 competitive applications were funded in FY 1999, 13 funded in FY 2000, and 8 applications in FY 2001.[18] Additionally, three Congressional earmarks were designated in FY 2000, and 8 were designated in FY 2001. In FY 1999, California received approximately $3.9 million out of a total $71.2 million. In FY 2000, when Congress began earmarking JARC funds, California received $3.9 out of an available $25.5 million for competitive awards. The remaining amount, $50 million as Table 4.3 shows, was earmarked. California received $2.25 million, or 4 percent of the total amount earmarked.

This trend increased in FY 2001 and FY 2002. In FY 2001, $75.2 million was earmarked out of $100 million in guaranteed funding. California, in turn, received $8.9 million, or 11 percent of the total amount earmarked. The following year, earmarks by Congress increased by almost $30 million dollars. The amount allocated to California increased to $10.2 million, but this figure accounts for only 9.3 percent of the total.

Table 4.3 JARC Funding in California, FY 1999-2002

	Competitive Funding ($ in millions)			Earmarked Funding ($ in millions)		
FY	**U.S.**	**CA**	**%**	**U.S.**	**California**	**%**
1999	$71	$3.9	5.6%	-	-	-
2000	$25	$3.91	15.6%	$50	$2.25	4.0%
2001	$25	$2.1	8.4%	$75.2	$8.9	11.8%
2002				$109	$10.2	9.3%
Source: Calculations from Federal Transit Administration data available at http://www.fta.dot.gov/wtw and information provided by Caltrans, Division of Mass Transportation.						

4.3 Welfare-to-Work Grants

The Welfare-to-Work (WtW) Grant program was authorized under the Balanced Budget Act of 1997. Under this program, the U.S. Department of Labor (DOL) provides grants to sates, tribes, and local communities to create job opportunities for the hardest-to-employ TANF recipients.[19] Similar to TANF funds, these grants support many services, only one of which is transportation. The grants provide job placement services, transitional employment, and other support services welfare recipients need to make

[18]This report examines specific JARC programs from FY 1999 – FY 2001.
[19]This category includes long-term welfare participants, participants reaching TANF time limits, non-custodial parents of TANF recipients, and individuals with poor work histories and education.

successful transitions into long-term unsubsidized employment. But because the WtW program targets the hardest to employ recipients, the program has a slightly different emphasis than the TANF program. Welfare-to-work funds:

- can be used only for transportation services not otherwise available to participants;
- can only be spent on transportation services for individuals participating in WtW activities;
- can be matched in the form of third-party in kind contributions;
- cannot provide financial assistance for the lease or purchase of vehicles; and
- cannot provide matching funds under the TANF program or other federal programs with the exception of the JARC program.[20]

In FY 1998 and FY 1999, the U.S. DOL awarded two rounds of WtW grants. Seventy-five percent of the funds were allocated as part of formula grants and the remainder was distributed as part of a competitive grant process. Formula grants are allocated according to each state's share of the poverty population within the United States and the number of individuals on welfare in the state. In FY 1998 and FY 1999, the U.S. DOL granted California $368 million. Over this same period the state provided $184 million in matching funds. These grants are allocated to California's Employment Development Department. While 85 percent of these funds are distributed to the counties, 15 percent is retained by the state for state-designated projects. In California, funds retained as state-designated projects are known as the "Governor's 15%." Similar to other formula grants, the Governor's 15% was awarded in FY 1998 and FY 1999. However, unlike the other 85 percent of the funds, there are no formula requirements ensuring that counties receive an equal distribution of these funds. These funds can be used to give special consideration and resources to certain types of programs, geographic locations, or organizations. In FY 1998 and FY 1999, a total of 46 agencies in California received funding from the Governor's 15 percent. A review of these programs shows that 14 agencies specifically mentioned transportation provision as either the principal objective of their proposed program or as a supportive service as part of a program that is broader in scope. California has allocated $18 million to programs that include a transportation component; these programs comprise approximately 22 percent of the total funds allocated under the Governor's program. Moreover, the funding has been used to provide resources to organizations other than public agencies; only 45 percent of the organizations funded under this program were government agencies.

The other 25 percent of Welfare-to-Work funds are competitively distributed. In consultation with local Workforce Investment Boards, local governments, community-based organizations, and other entities can apply to the U.S. DOL for WtW competitive grants. No matching funds are required for these funds. Program selections are based on the relative need for the program, innovativeness in program design, proposed program outcomes, evidence of local collaboration and sustainability, and the demonstrated capabilities of the applicant organization. Twenty-five agencies in California received

[20] As provided in section 3037 of TEA-21.

competitive awards. Ten focused on transportation services or specifically mentioned providing transportation as a supportive service.

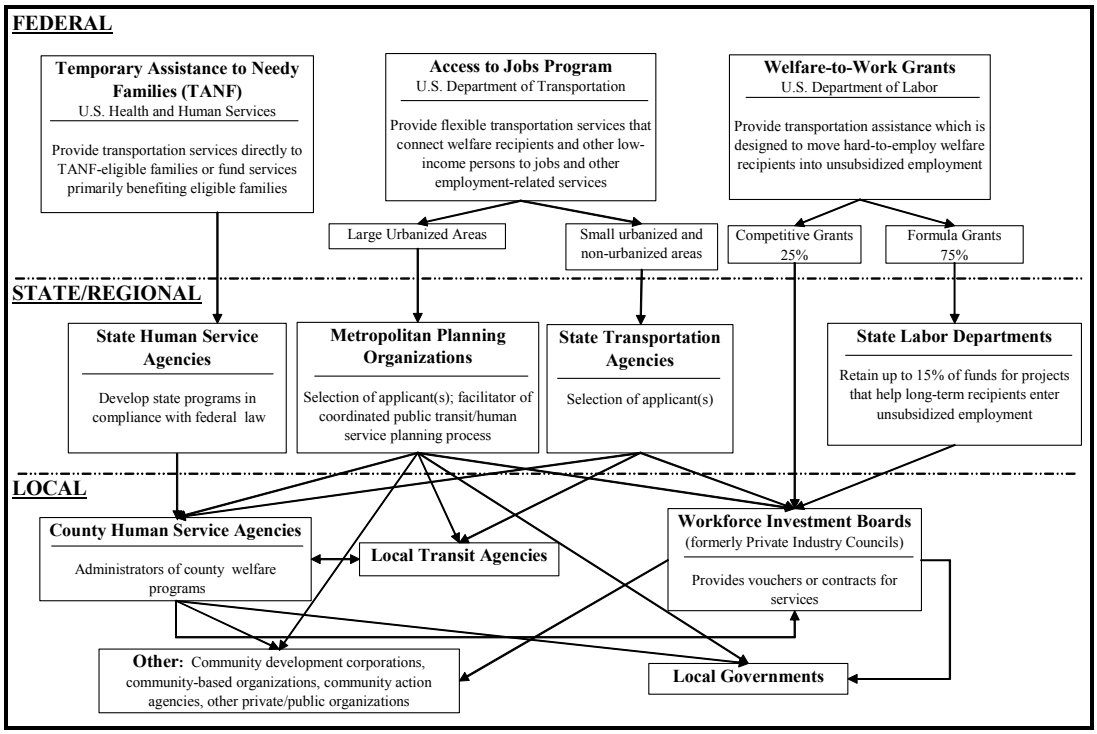
4.4 The Collaborative Environment

As these programs demonstrate, the responsibility for developing transportation programs for welfare participants spans multiple public agencies—primarily transit, human service, and employment agencies. Figure 4.2 traces the flow of federal funds from their origins in the three major federal agencies, the Departments of Health and Human Services, Transportation and Labor, to state agencies and then down to an array of local and regional public, private, and non-profit institutions. The flow chart illustrates the agencies involved in funding and planning for the transportation needs of welfare recipient. It also suggests the complex institutional relationships that exist across levels of government and among local agencies.

To these relationships, each agency brings a unique perspective and expertise. Transit agencies contribute their transportation expertise. Welfare and employment agencies and their professional staff possess information about the characteristics, behavior, and needs of their largely female, low-income clients, and employment agencies provide the vital link to the labor market and to employers. Partnerships between these agencies have a specific goal: the Secretaries of the U.S. Departments of Health and Human Services, Labor, and Transportation issued joint guidance in coordinating service provision "…to encourage States, tribes, and communities to take full advantage of existing resources to develop seamless, integrated services addressing the transportation challenge of moving people from welfare to work" (U.S. Department of Health and Human Services, 2000).

As discussed in subsequent sections of this report, the programs were specifically designed to exploit local knowledge about transportation resources, labor markets, and welfare recipients. By devolving responsibility for welfare and transportation planning to local agencies, legislators hoped to enable more community-sensitive programs, as well as spark innovation. The complex organizational structure in Figure 4.2 demonstrates the extent to which the programs have been established to foster interagency collaboration. But program design guarantees neither collaboration nor innovation; programs administered by many agencies can turn out to be duplicative, fragmented, and ineffective just as easily as they can be ground-breaking or collaborative. The outcomes depend not only on program design, but also implementation and performance. We take up these issues in Section 8 of this report.

Figure 4.2 Federal Transportation Funds for Welfare Recipients and Low-Income Individuals



5. Low-Income Adults and Geographic Access to Employment

In this section we take up the issue of employment accessibility. We first analyze access to jobs by identifying neighborhoods and areas of the state with different densities of both jobs and low-income households. In this chapter, we highlight the data for the largest urban areas; however, data for all 58 counties are included under a separate cover. These neighborhoods form the basis for the geographic targeting of transportation services discussed in the conclusion, Section 9. We then examine the relative availability of low-wage employment accounting for competition for available job openings. Finally, we apply a measure of spatial access to employment in a set of statistical models to determine the effect of job access on welfare usage rates.

The major findings from this analysis include the following:

- There are still high concentrations of low-income residents and low-wage job opportunities in many central city neighborhoods;

- Some neighborhoods with high concentrations of low-income residents remain isolated from employment; these include Watts in Los Angeles, East Oakland in Alameda County, South Sacramento in Sacramento County, and neighborhoods in Eastern and Southern San Diego County;

- Many job-rich neighborhoods with high concentrations of low-income residents have highly competitive local labor markets in which there are many applicants for each job opening;

- Low-income residents living in areas with highly competitive labor markets may have improved employment outcomes if they were able to travel to areas in which the ratio between applicants and job openings was lower; and

- Spatial isolation from employment is likely greatest among the transit-dependent, rural poor. Although few in number and spatially dispersed, these welfare recipients cannot rely on the extensive public transit networks typically found in dense urban areas.

5.1 Introduction – Employment Accessibility

Accessibility is the measure of an individual's opportunity—at a given location—to participate in a particular activity or set of activities (Thakuriah, 2002). For welfare recipients, differences in access—to employment opportunities, to social service and training centers, and to transportation services—can present real barriers to finding and keeping employment (Allard and Danziger, forthcoming; Blumenberg and Ong, 1998; Ong and Blumenberg, 1998). Although job accessibility is simple to understand

conceptually, the creation of an analytical index that allows the quantification of accessibility poses a challenge.

Accessibility encompasses more than mere physical proximity, and researchers have developed a number of measures to quantify spatial accessibility.[21] These measures extend from various theoretical perspectives, have associated advantages and disadvantages, and are dependent upon the availability of appropriate data. The measures incorporate the transportation network, existing land use patterns, the array of opportunities available to consumers (whether or not they use them), individual time constraints on travel, and rational or utility-based choices made by travelers. All of these measures attempt to describe the way in which the separation between points determines an individual's relationship with his or her environment. Put another way, accessibility can be thought of as the distance separating points mediated by other relevant factors. Some of the most significant factors mediating job accessibility are:

-*Urban structure—the array of opportunities such as jobs, services, child care centers etc. available to consumers.* The ability to reach an array of destinations within a certain commute distance varies by geographic location. This relates directly to the physical separation between points, and indirectly to the difficulty (or costs) of reaching those points from a given origin. Different urban structures are more or less conducive to individual travel modes. For example, dense cities tend to be associated with large shares of trips being made on foot, by bicycle, or on transit; in low-density areas, virtually all trips are made in private vehicles.

-*Travel costs—the out-of-pocket expenses and time associated with travel from Point A to Point B.* Travel costs take a variety of forms and are incurred in different ways. Costs include out-of-pocket expenses such as transit fares, interest rates on auto loans, and auto insurance costs, as well as non-monetary costs such as time. Individuals with private vehicles can travel greater distances and reach many more destinations in a shorter time than those dependent on public transit. The purchase cost of a car is substantial, but the marginal cost of a given trip is quite low. On the other hand, there is no large up-front cost to the consumer for transit, however the trip cost may be higher for out of pocket costs (transit fares), non-monetary time costs, and perceived costs in reduced trip flexibility. Policies often attempt to reduce costs for low-income travelers through various kinds of subsidies and services.

-*Discount Rate—the rate by which costs diminish the importance of less accessible destinations.* Travel costs increase as the distance traveled increases. Furthermore, the rate at which costs increase is probably nonlinear, with short trips substantially less costly than longer trips. These costs are not uniformly related to distance, rather they are developed within the context of the trip. Long trips to an unknown destination will be perceived as being more difficult than a

[21]See Baradaran and Ramjerdi (2002) and Handy and Niemeier (1997) for recent reviews of these measures.

long trip to a known destination. This is a particularly important concept for understanding the behavior of job seekers.

-*Activity Patterns and Time Constraints—the types and schedule of daily activities.* Trips must be understood in the context of all daily travel. Much of the past research on job accessibility has overlooked the importance of non-work trips in understanding job accessibility. This is particularly true among welfare recipients who, by definition, have childcare responsibilities. In general, travel patterns and behavior vary by income, race, and sex. They also vary by employment status. Job searchers frequently travel to multiple employment destinations in a single day; this type of job search activity is required by welfare-to-work programs.

-*Spatial Competition—accessibility of the same activity to other residents.* The relative accessibility of employment and services is diminished by the accessibility of these same jobs and services to other residents. Low-income residents may have difficulty competing for available jobs since they often face numerous employment barriers (Blumenberg, 2002; Danziger et al., 2000; Green et al., 2000). And competition for existing services—child care, health care, job training—may result in delayed and/or forgone care.

Our analysis focuses on the following five major urban areas in the state: the Los Angeles Region (Los Angeles, Ventura, San Bernardino, Riverside and Orange Counties), the San Francisco/Bay Area (Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Solano Counties), Fresno County, Sacramento County, and San Diego County. These areas comprise the highest concentrations of both low-income persons and low-wage jobs. Map 5.1 shows the spatial distribution of low-income residents and low-wage jobs across California census block groups. The dark brown areas represent half of all low-income residents in the state in the highest density block groups, and the blue shaded areas represent half of all low-wage jobs in the highest job-density block groups. As the map shows, employment and low-income residents are concentrated in the major urban areas; the remainder of the state, represented in yellow, has relatively low densities of both jobs and low-income residents. While job accessibility is equally (or perhaps more) important outside of the large urban areas, the possibilities for any detailed analysis are hampered by the overall low population densities. In some areas, particularly rural areas, the smallest unit of analysis available—the block group—is often too large to draw any firm conclusions about the spatial relationship between jobs and residents in these areas. Information on the general distribution of jobs and low-income persons by block group is, however, presented for each county in the accompanying set of county maps.

Map 5.1 Job Accessibility Matrix – California

Our analysis is also limited by the availability of statewide data. Data on low-income residents, welfare recipients, and low-wage employment are available at the block group level. However, these data are not linked to mode of travel; nor are low-income residents linked to specific employers. Therefore, we do not know how people in this group get to work or how far they go. Moreover, outside of two specialized surveys that include abbreviated travel diaries of welfare recipients in Fresno and Los Angeles, we do not have data on the detailed activity patterns or travel behavior of low-income residents in California. Finally, while we have information on fixed-route transit lines, we have little information on existing levels of public transit service such as hours of operation, frequency, or quality of service.

5.2 Measuring Job Accessibility

Because no one method of examining the relationship between jobs and residences completely characterizes employment accessibility, we use three related strategies to produce a composite picture. The three methods are as follows:

Density. The first component of our analysis is simply a comparison of the density of low-income residents and low-wage jobs by block group. Since we

would actually like to know how many jobs are accessible to workers in a given location, calculating the simple ratio of jobs to workers in an area may not tell us much because jobs and workers tend to locate in different immediate neighborhoods. We can partially overcome this difficulty by moving to larger geographic areas, representing a more realistic job search area. However, as the size of the areas increase, it becomes more and more difficult to distinguish among individual neighborhoods.

Gravity Function. Since residential neighborhoods are often separated from, but often still close to, areas with high concentrations of employment we can overcome some of the problems of the simple density measure by also considering the characteristics of neighboring areas. We apply a mathematical function that credits a given starting tract with some of the characteristics of the surrounding tracts. Nearby tracts count more than tracts farther away. This has the effect of averaging census tract characteristics without losing the distinctions between neighborhoods.

Employment Competition. Using a gravity model, we are able to establish a generalized measure of jobs per person that varies by neighborhood, but is not hampered by boundary problems. This measure enables us to directly compare job concentrations with the labor market. However, even in areas with high concentrations of employment opportunities there may be many more low-wage job seekers than there are available low-wage jobs. Therefore, in our final approach we compare job availability with the number of potential job seekers for those jobs.

5.3 Job Accessibility in Los Angeles County

We begin with a detailed examination of Los Angeles to highlight our methodological approach and then apply this approach to the other four large urban areas in the state.

Population and Employment Density. Maps 5.2 and 5.3 show the density of low-income adults and low-wage employment for Los Angeles. The analysis uses 2000 census information at the block group level to determine the spatial distribution of low-income residents.[22] Low-wage jobs densities are estimated using block-group level data from American Business Information (2000).[23]

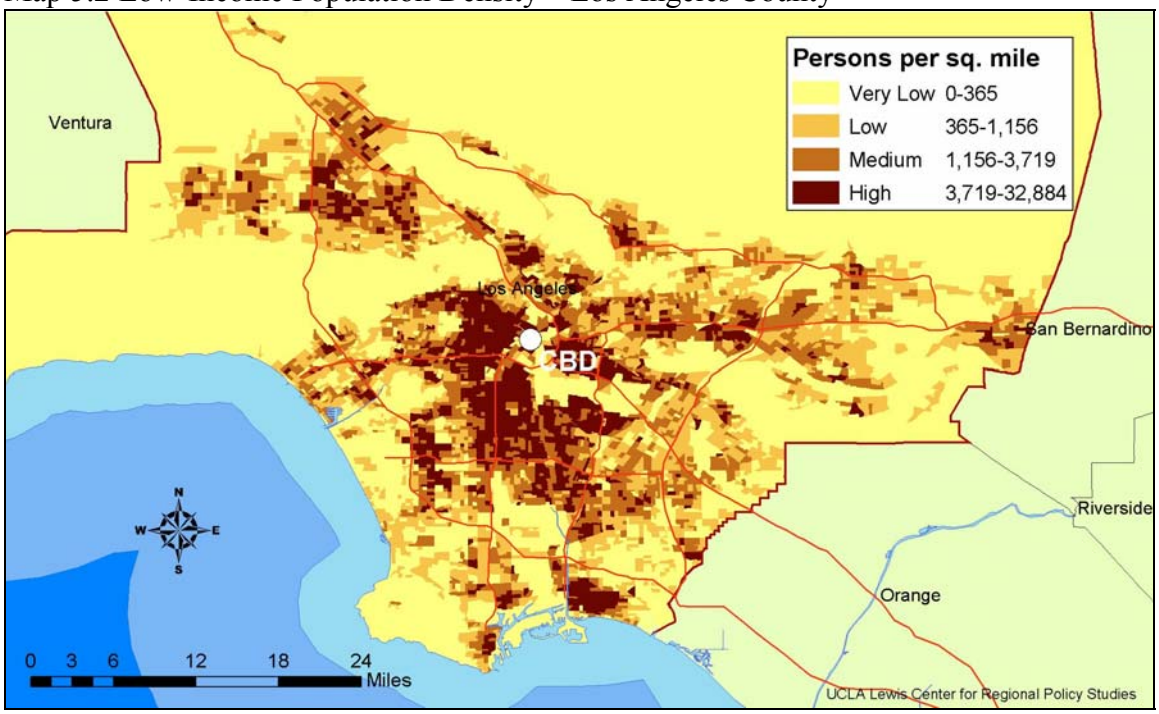
Taken together, the maps show that high concentrations of low-income residents and jobs remain in the central parts of the city, even though jobs and residents may not be located in the same block group or neighborhood. The white dot in the middle of both maps identifies the central business district (CBD) in downtown Los Angeles. Map 5.2 shows high concentrations of low-income residents in the central part of the city, just east

[22]In this case we use working-age population (18-64) below 100 percent of the federal poverty line.
[23]For a more detailed description of these data, see Appendix A.

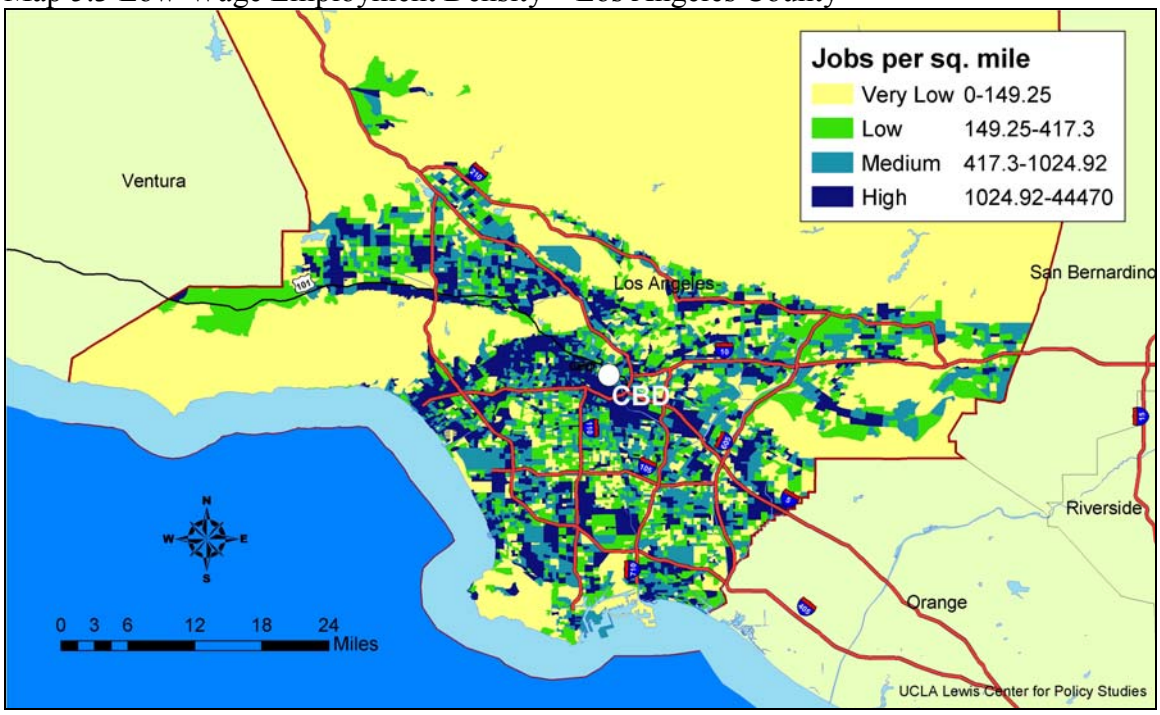
and south of downtown, as well as in the City of Long Beach, located at the very bottom of the map. Map 5.3 shows high job densities in downtown, extending west along Wilshire Boulevard to the coast. Other job-rich neighborhoods include the airport, the ports, and the commercial district along Ventura Boulevard, which is the major east-west street in the San Fernando Valley to the north. The big hole in the center of this map—neighborhoods with low or very low employment densities—includes the job-poor areas surrounding Watts.

These maps illustrate the methodological weakness inherent in using a simple comparison of densities across census-defined geographies such as block groups. The checkered patterns represented in both maps are not surprising, since few people work in the very same neighborhood in which they live. Areas of high population density are often different from areas of high employment density. But urban block groups tend to be small and their boundaries artificial. Therefore, low-income residents who live in job-poor block groups may still have excellent access to employment within a reasonable distance from their homes.

Map 5.2 Low-Income Population Density – Los Angeles County



Map 5.3 Low-Wage Employment Density – Los Angeles County



Application of the Gravity Model. To account for the spatial separation between jobs and residences and the fact that most low-income workers commute to destinations outside of their immediate neighborhood, we apply a gravity measure to our analysis. This technique attempts to better model actual travel behavior by estimating the number of potential jobs that low-income workers can reach within a certain distance of their residences. The model estimates the likelihood of finding a job based on proximity to nearby employment.[24]

The analysis draws from both the 1990 Census and ABI employment data, and uses both at the block group level.[25] Using the geographic center of each block-group (the centroid) to approximate the actual individual job and home locations, we employ a gravity function to sum the number of all jobs and low-income residents within three miles of each block group. Jobs and population less than a mile away are fully counted, while jobs and residents located between one and three miles are weighted by the inverse of the distance between block group centroids. The weighting discounts travel to more distant locations under the assumption that increased distance reduces the likelihood of employment. Employment and low-income residents that are located over three miles away are excluded. The application of the gravity model to the low-income population and to low-wage employment produces a relative index. We rank order each block group

[24]See Appendix A for a detailed explanation of the methodology.

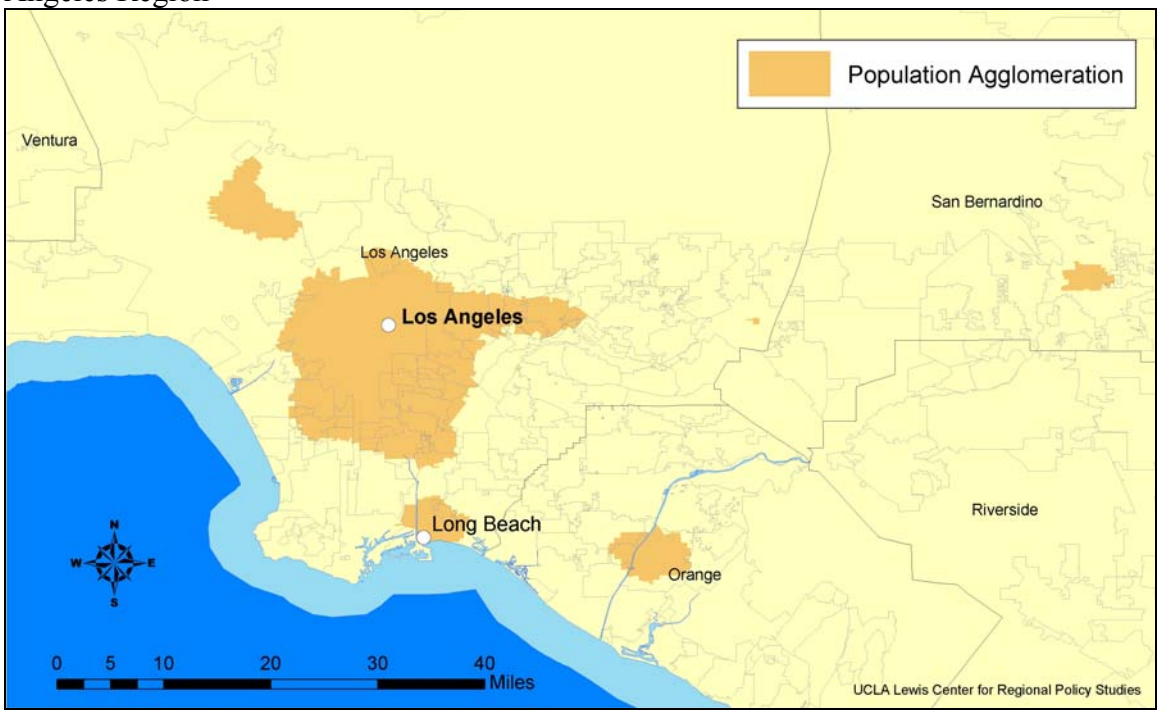
[25]The 2000 ABI data were only available using 1990 block group boundaries. Therefore, for the purposes of the mapping, we use 1990 Census block group data. The statistical models rely on census-tract level data from the 2000 Census.

according to this index and tabulate the number of actual jobs or people located within each block group.

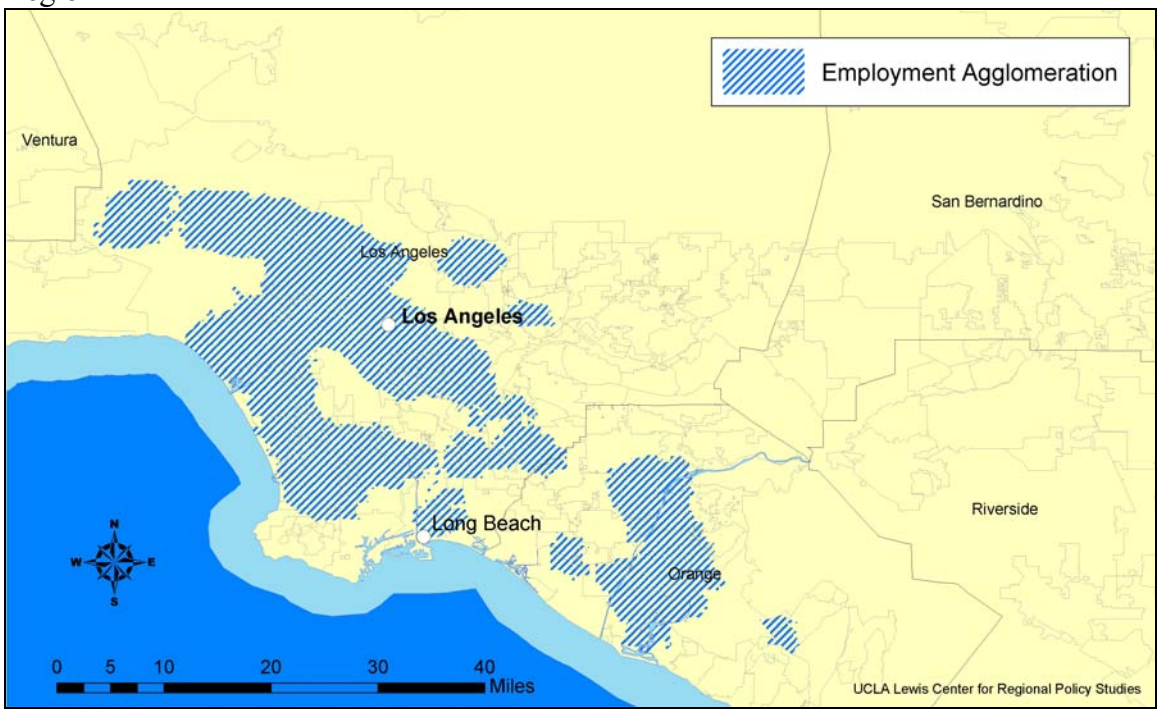
Map 5.4 shows the areas in the Los Angeles Region with the highest scores for the population concentration index. Fifty percent of the low-income population in the Los Angeles Region resides within the shaded areas. The densest areas in Map 5.1 coincide with the areas shaded in Map 5.4. However, the gravity model helps to filter out small population variations and captures only the area of overall highest residential concentration. Similar to the previous map, the highest population concentrations occur around downtown Los Angeles, in the San Fernando Valley, the City of Long Beach, and in Santa Ana (located in Orange County).

Map 5.5 shows the results of the gravity function with respect to employment. One-half of all low-wage jobs in the Los Angeles Region are represented by the shaded areas. In general, low-income employment is much more dispersed than low-income population. Once again, the highest job densities are located in the Los Angeles CBD, in the San Fernando Valley, Long Beach and Orange County, and in additional areas south and east of downtown Los Angeles and along the coast.

Map 5.4 Low-Income Population Distribution Index Using the Gravity Function—Los Angeles Region



Map 5.5 Low-Wage Employment Density Using the Gravity Function—Los Angeles Region

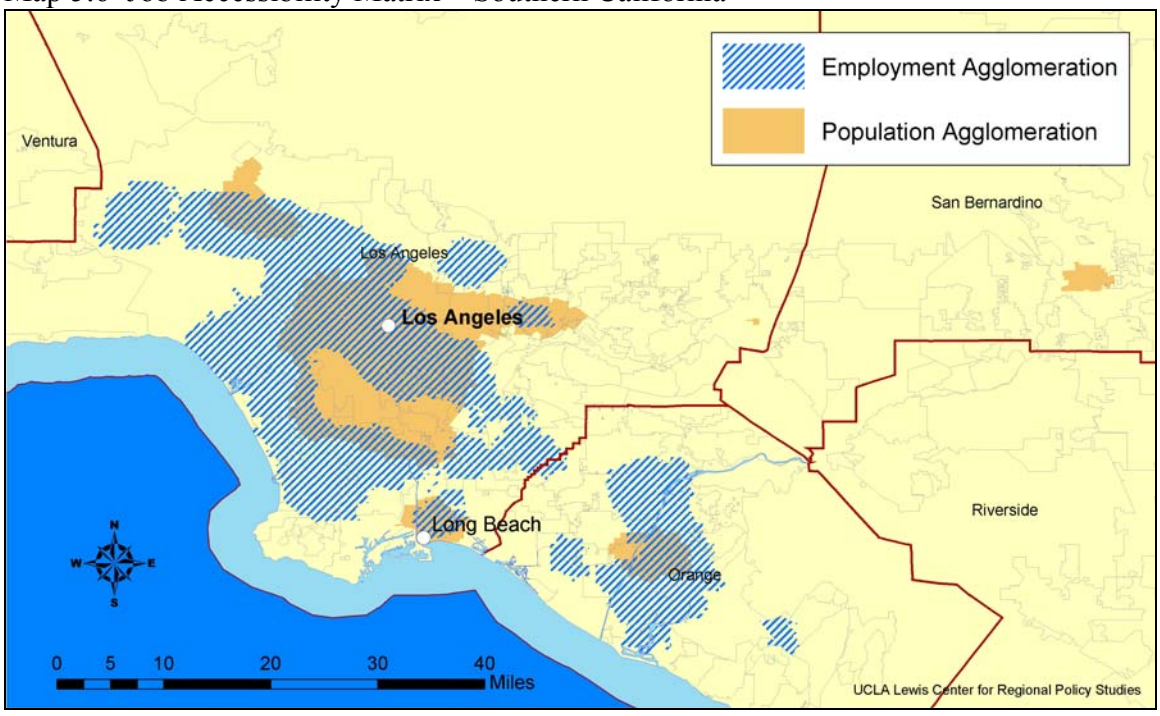


Area Types. In Map 5.6, we map the union of the two previous maps. In doing this, we can identify a matrix of four areas classified by their relative job richness and population densities, as illustrated in Table 5.1. This matrix, combined with the maps for the urban areas, provides a framework for evaluating particular transportation service options, however, detailed planning studies would be needed to determine the most appropriate levels of transit types and service – fixed and non-fixed route – to serve these neighborhoods. We will return to this matrix in the concluding section of this report when we discuss policy options.

Table 5.1 Population and Employment Density Matrix

		Density of Low-Income Population	
		Higher Density	Lower Density
Density of Employment Opportunities	Job Richer	Job-Richer Areas with Higher Concentrations of Low-Income Residents	Job-Richer Areas with Lower Concentrations of Low-Income Residents
	Job Poorer	Job-Poorer Areas with Higher Concentrations of Low-Income Residents	Job-Poorer Areas with Lower Concentrations of Low-Income Residents

Map 5.6 Job Accessibility Matrix—Southern California



Job Competition and Employment Access. The job accessibility measures described above incorporate only one dimension of the labor market, which is spatial proximity. Proximity is certainly important, but access to employment is also influenced

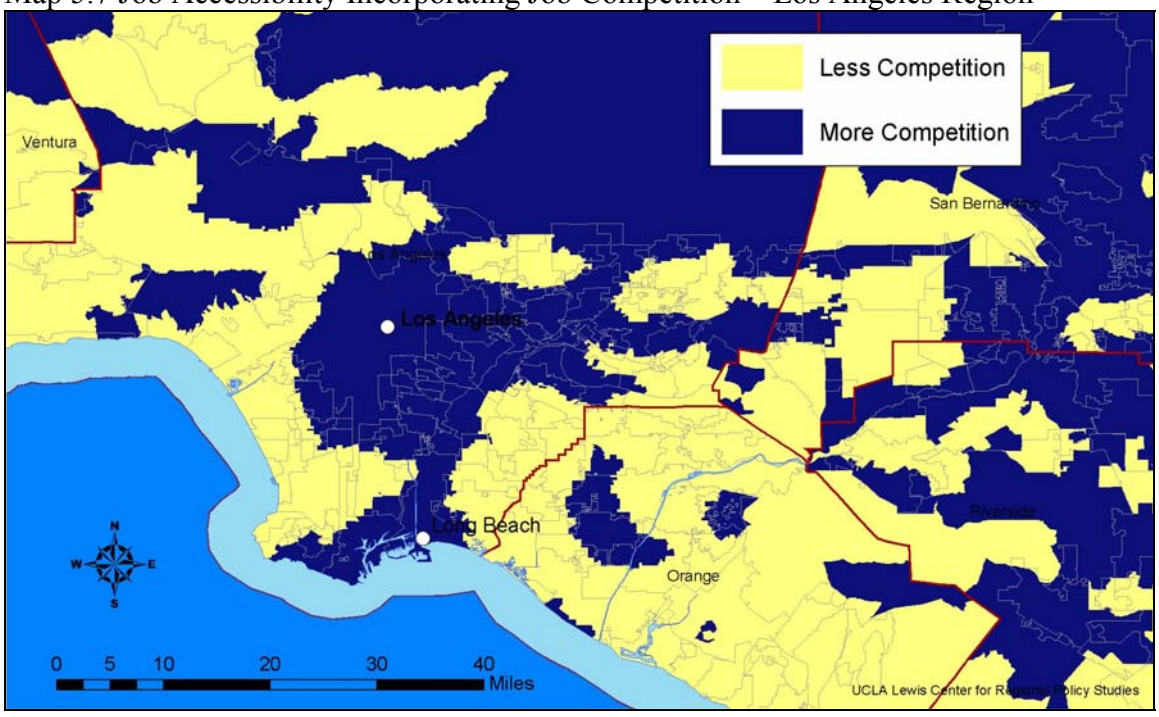
by the number of other low-wage workers who are also competing for a fixed number of job openings. In other words, nearby employment may be perceived as relatively less accessible than if those same jobs were located in a less competitive labor market. For this reason, we use the proximity measures explained above to explore neighborhood competition for jobs. (See Appendix A for a more detailed description of the methodology).

The results obtained by incorporating job competition present a very different picture of employment accessibility in Los Angeles than the previous maps. Maps 5.3, 5.5 and 5.6 show that the neighborhoods surrounding the central business district have high job densities, but Map 5.7 shows that these jobs may still be less accessible to local job seekers because of the intense competition for them. This finding does not imply that job-rich neighborhoods are unimportant for low-income job seekers. Many jobs are located in the central part of the city and many low-income residents who live in these neighborhoods find jobs within a few miles of their homes (County of Los Angeles, 2000). However, the map suggests that it may be relatively more difficult for low-income residents to compete successfully for employment in some of these job-rich neighborhoods. They may have more employment success in other parts of the region, where fewer low-wage residents are competing for available positions.

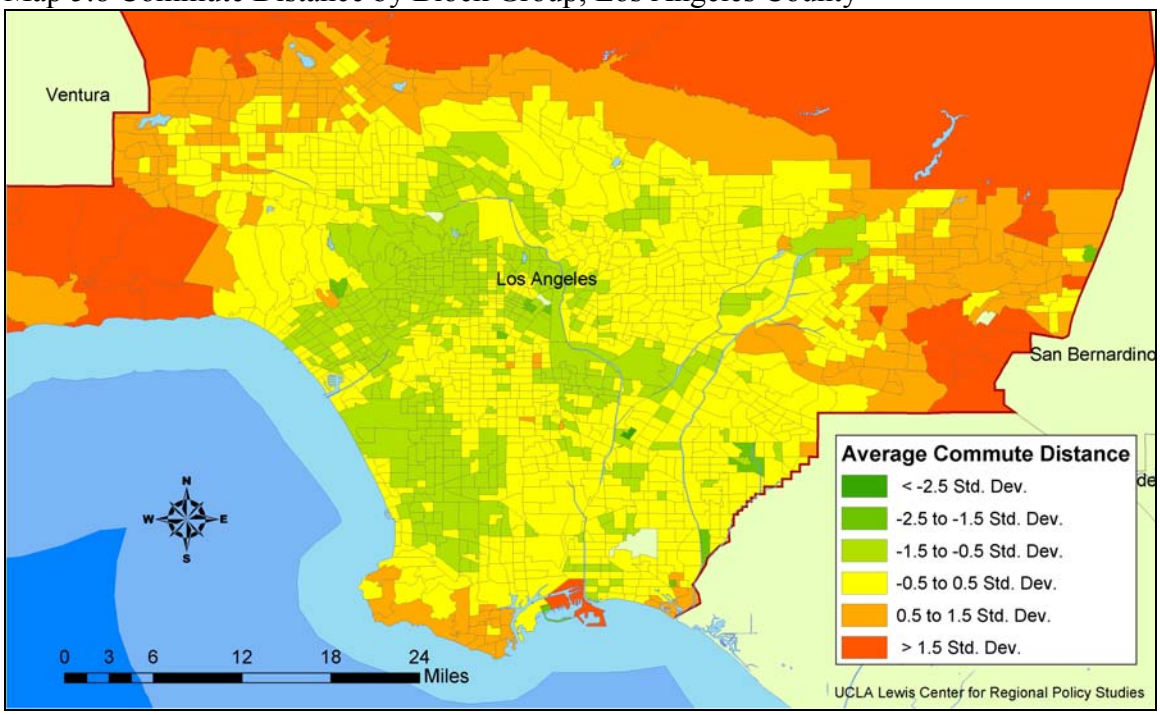
If job competition is an important factor in determining how far workers commute, then residents living in neighborhoods with tight labor markets (where there are few jobs relative to the number of job seekers) would have to travel farther than those living in neighborhoods with loose labor markets (where jobs are more plentiful than job-seekers).

There is some evidence that this is the case for Los Angeles. Map 5.8 uses data from the 1990 Census Transportation Planning Package to show the distribution of average travel distance by census tract for Los Angeles County (produced by Ong and Miller, 2002). The units are in standard deviations from the mean travel distance. This map supports the findings of Map 5.7. Areas in which there are many jobs relative to the size of the local workforce tend to be areas with slightly shorter commutes compared to areas in which there are many jobs but many more job seekers (shown in yellow).

Map 5.7 Job Accessibility Incorporating Job Competition – Los Angeles Region



Map 5.8 Commute Distance by Block Group, Los Angeles County



Produced by Paul Ong and Doug Miller (2002), UCLA Lewis Center for Regional Policy Studies.

5.4 Job Accessibility in the San Francisco-Bay Area, Fresno, Sacramento, and San Diego

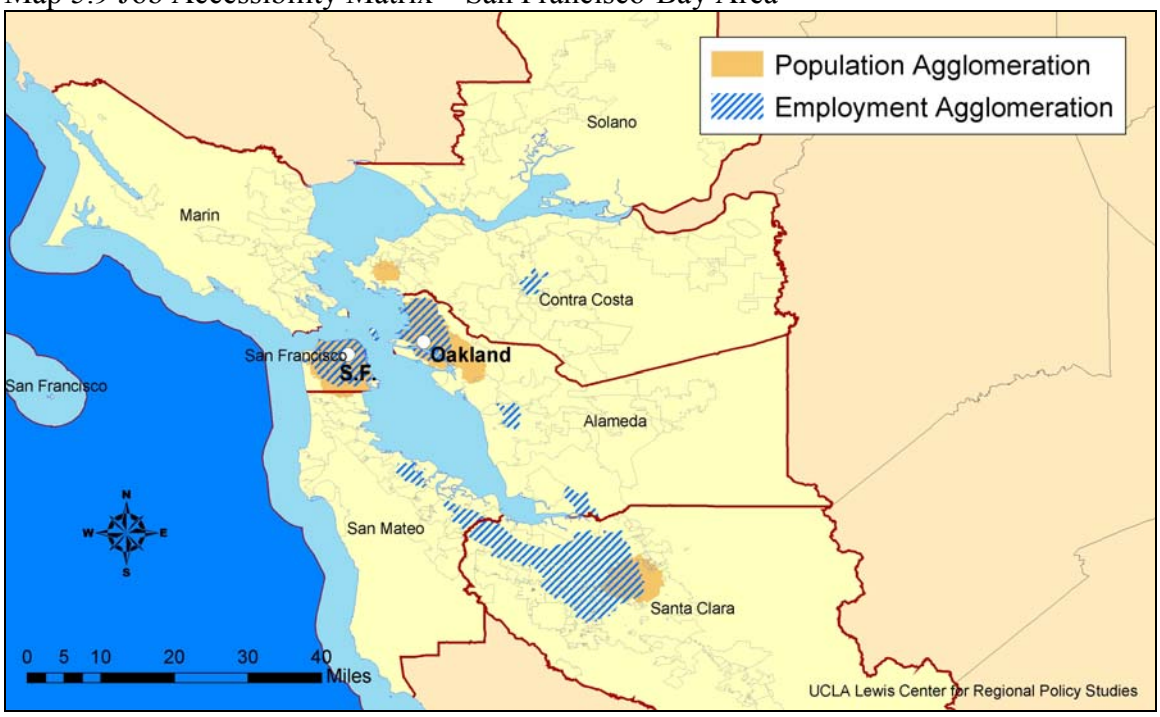
The next set of maps shows job accessibility in the four additional major urban areas of the state—the San Francisco-Bay Area, Fresno, Sacramento, and San Diego. We present two maps for each area. The first map shows the job accessibility matrix, which superimposes high concentrations of low-income residents over high concentrations of low-wage employment. The second map shows job accessibility accounting for job competition.

As with Los Angeles, the maps indicate that high concentrations of low-income residents and low-wage employment are still located in the central parts of these urban areas. However, almost every urban area contains some neighborhoods with high concentrations of low-income residents who are spatially isolated from employment. These include East Oakland in Alameda County, South Sacramento in Sacramento County, and neighborhoods in Eastern and Southern San Diego County. The one exception may be Fresno County, where within the urban area welfare recipients and jobs are almost spatially congruent; this is likely due to the compact size of the metropolitan area.

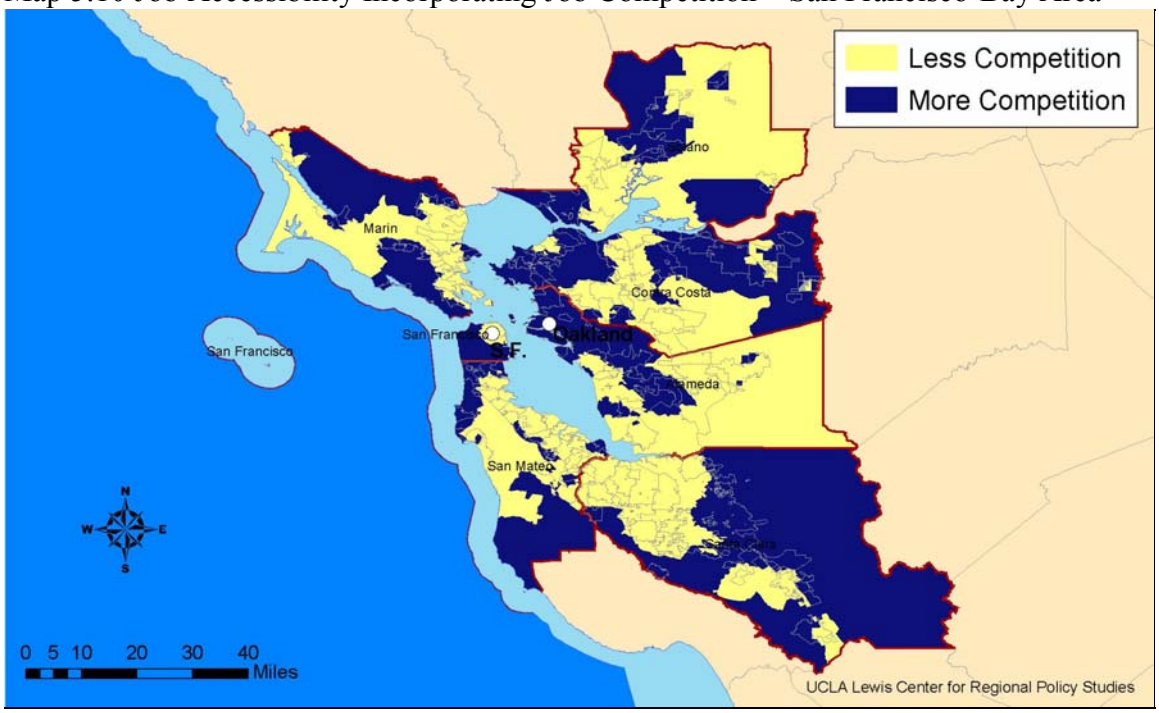
But once again, the incorporation of job competition shifts the location of accessible jobs in all four areas. With one exception (Sacramento County), areas with more accessible employment are located farther away from the central business district.[26] In Sacramento County, the high concentration of public sector employment surrounding the city center and the state capitol still provides ample low-wage job opportunities for nearby low-income job seekers. Nevertheless, low-income residents living in areas with highly competitive labor markets may have improved employment outcomes if they had the ability to travel to areas in which the ratio between applicants and job openings is lower.

[26]However, distances from the central business district to job-rich neighborhoods may still be relatively short.

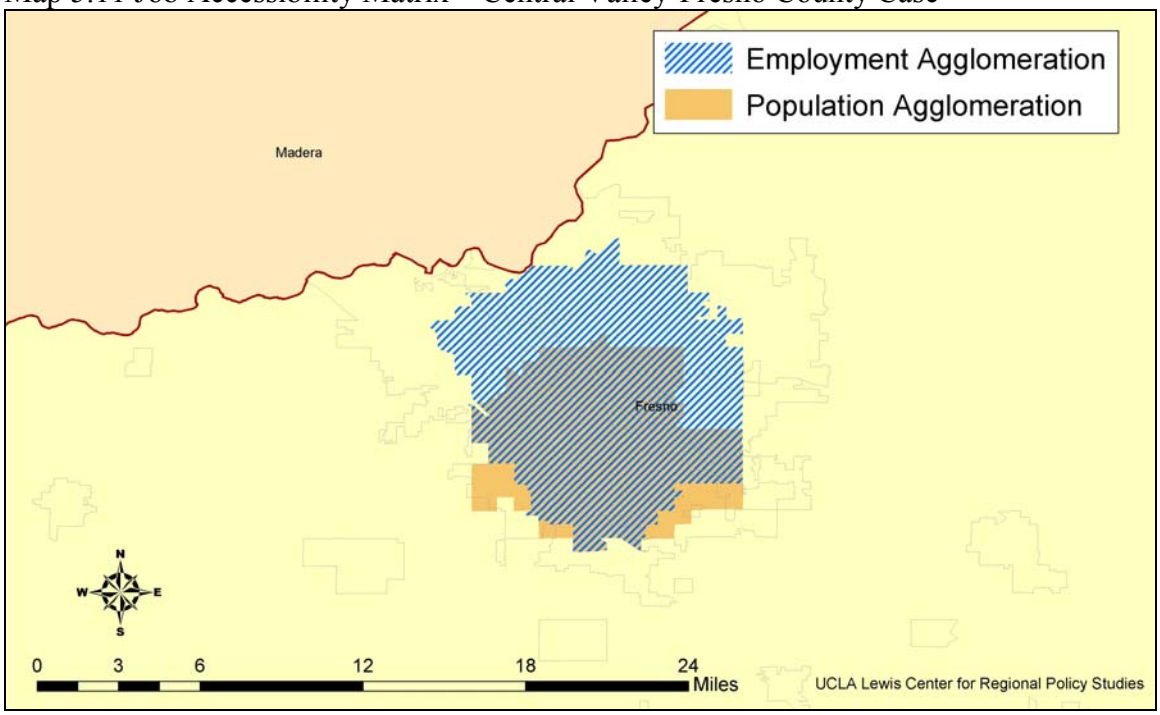
Map 5.9 Job Accessibility Matrix—San Francisco-Bay Area



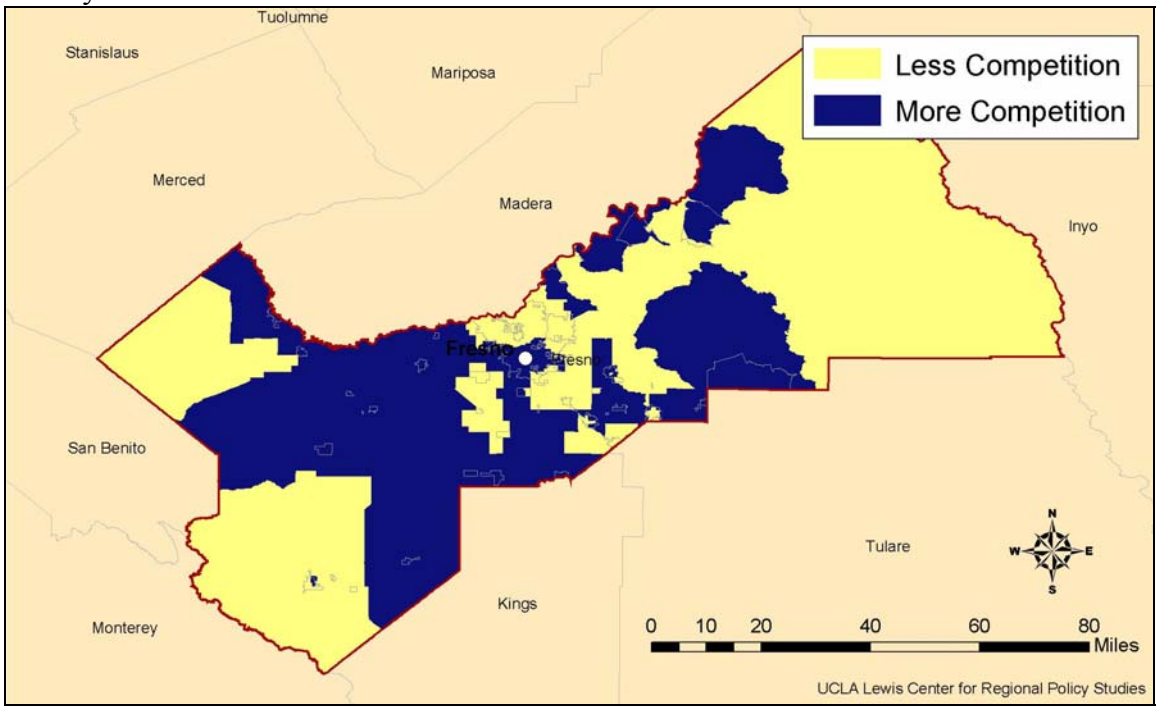
Map 5.10 Job Accessibility Incorporating Job Competition—San Francisco-Bay Area



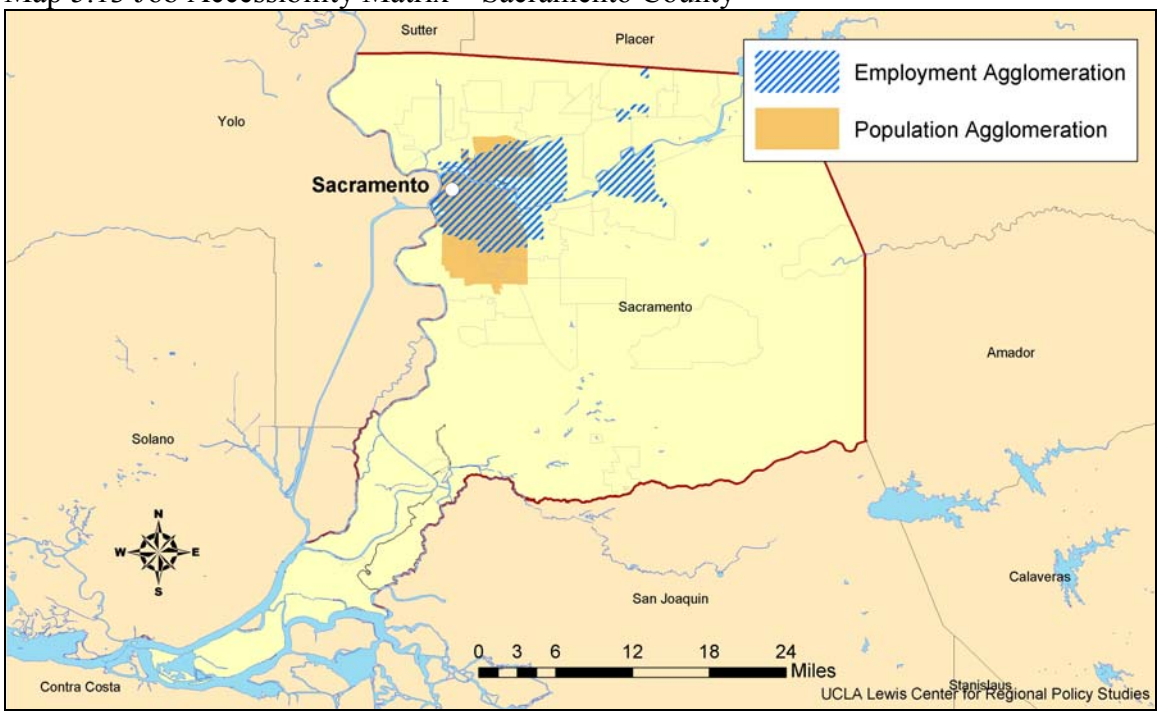
Map 5.11 Job Accessibility Matrix—Central Valley-Fresno County Case



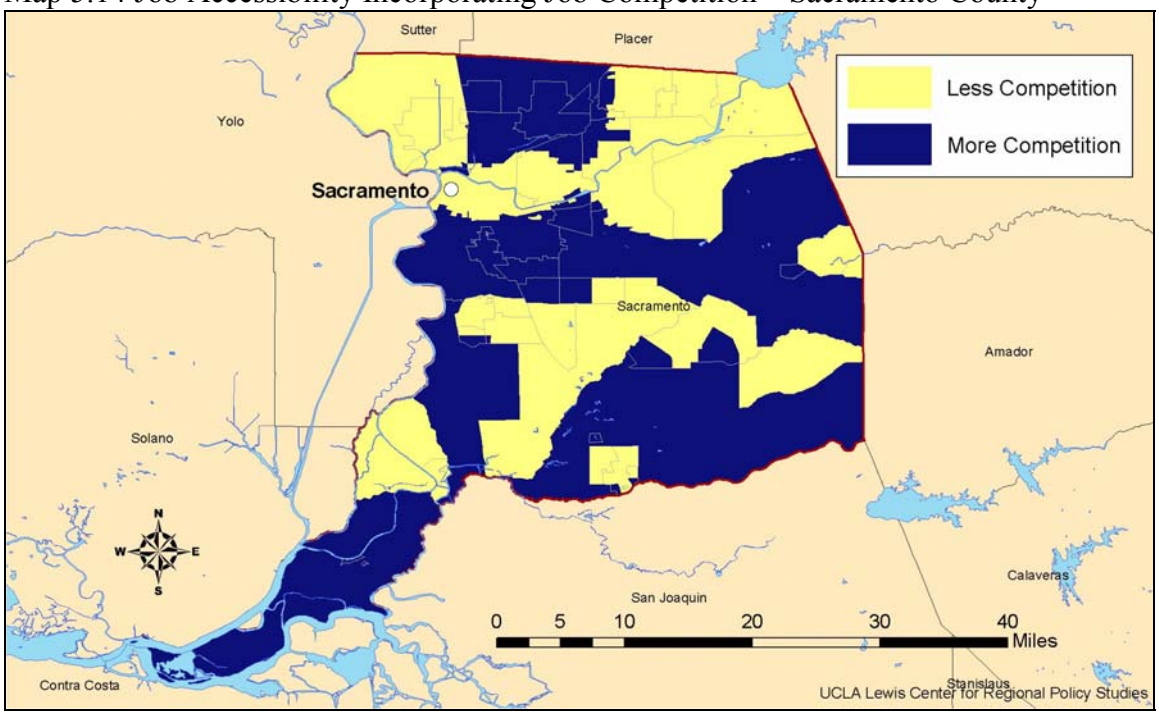
Map 5.12 Job Accessibility Incorporating Job Competition—Central Valley-Fresno County Case



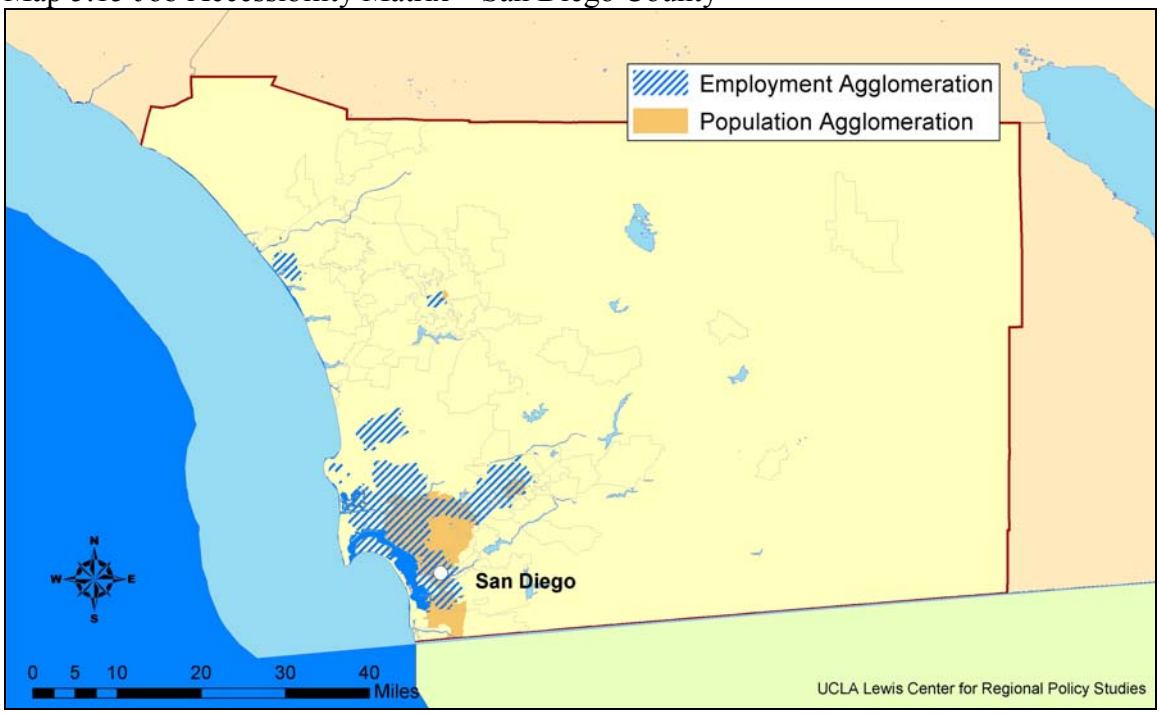
Map 5.13 Job Accessibility Matrix—Sacramento County



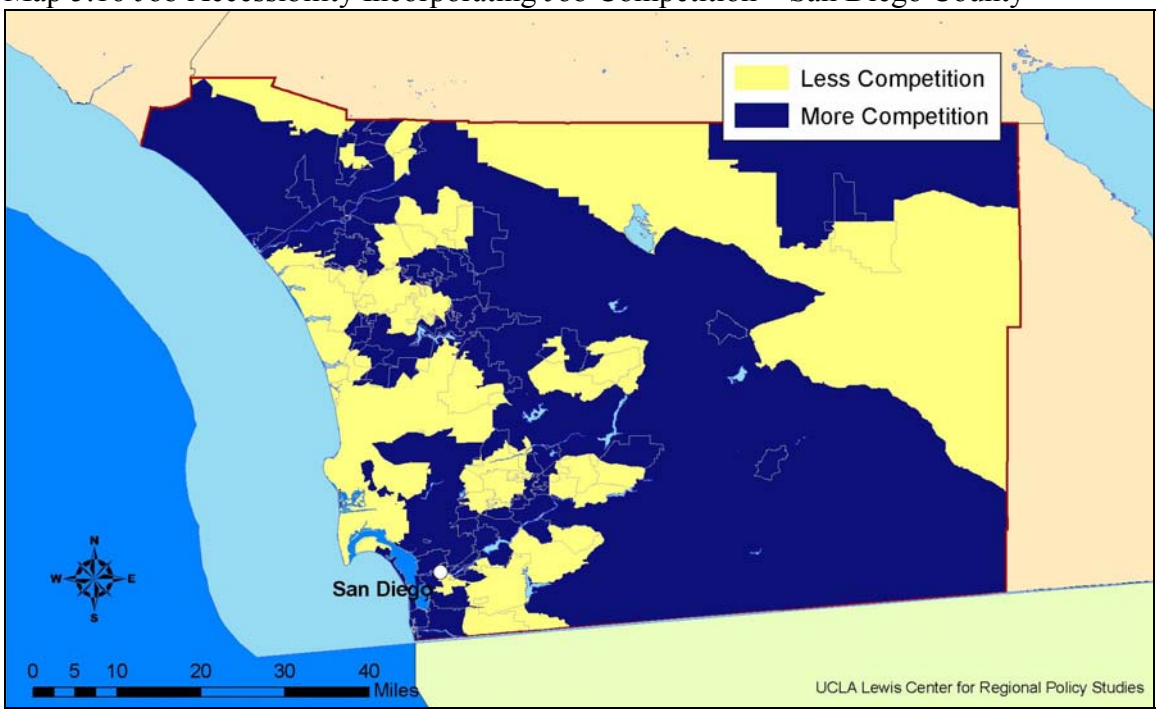
Map 5.14 Job Accessibility Incorporating Job Competition—Sacramento County



Map 5.15 Job Accessibility Matrix—San Diego County



Map 5.16 Job Accessibility Incorporating Job Competition—San Diego County



5.5 The Relationship between Job Access and Welfare Usage Rates

The discussion of job accessibility and competition makes good conceptual sense, but the measure must improve our ability to predict outcomes in order to be useful. To empirically test the usefulness of our access measures, we modeled welfare usage rates (the ratio of welfare recipients to the working-age adult population) as a function of both spatial proximity to *and* spatial competition for employment controlling for other determinants of welfare usage at the census tract level such as household structure, median income, education, race, and language ability. We applied this model to the data for 15 of the most urbanized counties in California.[27] Our methodology and the full model results are included in Appendix A.

Table 5.2 shows the relationship between welfare usage rates and the two measures of employment access. In both cases, a higher index is indicative of greater access to employment opportunities. The areas that are shaded denote statistically-significant relationships. In nine of the 15 urban areas, the number of available jobs controlling for job competition has a statistically significant and negative effect on welfare usage rates. In other words, in Alameda, Contra Costa, Kern, Los Angeles, Orange, Riverside, San Diego and Santa Clara counties, welfare usage rates are lower in neighborhoods where there is less intense employment competition controlling for other factors that influence welfare usage rates.

Employment proximity has a negative relationship with welfare usage rates in Los Angeles and San Bernardino County. However, in Fresno, Orange, Riverside, and San Diego Counties, employment proximity and welfare usage rates are positively related. These relationships may suggest one of three things. In some counties, proximity to jobs regardless of competition makes a difference. In other counties, such as Orange, Riverside, and San Diego, welfare recipients may live close to jobs but competition for these jobs results in higher welfare usage rates. In Fresno, where there is no statistical relationship between job competition and welfare usage rates, it is likely that the positive relationship between job proximity and welfare usage is due to the residential location of welfare recipients; recipients in Fresno may be more likely to live close to employment.

[27]Because the model results become less reliable as the number of independent observations (in this case census tracts) becomes small, counties with fewer than 100 census tracts were excluded from the model results. This also makes sense considering that the relationship between workers and jobs can be very imprecise in large-sized census tracts where, even within the census tract, residents may live far from employment opportunities.

Table 5.2 The Relationship between Job Access and Welfare Usage Rates

	Alameda	**Contra Costa**	**Fresno**	**Kern**
Job Access--Job Competition	**-**	**-**	+	**-**
Job Access--Job Proximity	+	-	**+**	+
	Los Angeles	**Orange**	**Riverside**	**Sacramento**
Job Access--Job Competition	**-**	**-**	**-**	**+**
Job Access--Job Proximity	**-**	**+**	**+**	-
	San Bernardino	**San Diego**	**San Francisco**	**San Joaquin**
Job Access--Job Competition	-	**-**	-	**-**
Job Access--Job Proximity	**-**	**+**	+	+
	San Mateo	**Santa Clara**	**Ventura**	
Job Access--Job Competition	-	**-**	-	
Job Access--Job Proximity	+	-	+	
*The shaded boxes denote statistically significant relationships.				

The strong relationship between job access (incorporating employment competition) and welfare usage rates suggests that low-income adults are either more likely to exit welfare or never apply for welfare if they live in neighborhoods where job availability is high. These findings suggest that the economic prospects of the poor would improve if they had access to neighborhoods with better odds of finding vacant jobs. Both transportation and housing mobility programs would serve this purpose. However, the findings of this analysis do not conclusively show that providing these types of programs will necessarily reduce welfare usage rates. To make this analytical leap, we must directly examine the effects of transportation and housing investments on economic outcomes of low-income program participants.

5.6 Access to Employment in Rural Areas

With respect to welfare recipients living in smaller cities and rural areas, relatively little is known. Rural welfare recipients appear to face unique challenges in making the transition into the labor market. Rural areas tend to offer fewer job opportunities, average earnings tend to be lower than in urban areas, and—in some counties—available jobs are concentrated in the highly seasonal agricultural sector, where the demand for labor fluctuates monthly (Fisher and Weber, 2002; Kaplan, 1998; Rural Policy Research Institute, 1999; Weber, Duncan, and Whitener, 2002). Rural welfare recipients typically find themselves living in areas with very little access to employment. These are areas distant from urban employment centers (Rural Policy Research Institute, 1999) with limited public infrastructure (public transportation, social service programs, and other services). Existing studies suggest that close to 40 percent of all U.S. rural residents live in areas without public transportation, and another 28 percent of rural residents live in areas with low levels of transit service (Rucker, 1994).

Some studies find that rural residents—including welfare recipients—must travel long distances to get to work, to reach services, and to make household-sustaining trips (Dewees, 2000). In reality, however, very little is known about the role of transportation in limiting the employment opportunities of rural welfare recipients. Most of the existing evidence is anecdotal. For example, in one study of welfare recipients in Iowa, a welfare participant is quoted as stating:

> I could have had a job on the 15th [of the month] but I didn't have a vehicle. It takes about half an hour to 45 minutes just to get downtown on the bus. Then another 20 minutes after transferring to the appropriate bus. The buses don't even start out here until 6:15 in the morning. So how the heck can I get to work by 6:30? (Fletcher, Flora, Gaddis, Winter, and Litt, 2002)

Table 5.2 presents data from the 1995 Nationwide Personal Transportation Survey (NPTS) on travel mode, distance, and commute time by settlement type. The figures show that the rural, low-income population averages very long commutes and are overwhelmingly dependent on automobiles for their work-related travel. Auto dependence among this population is likely due to their long average commute distances, as well as to limited rural transit service. Since such a high percentage of the low-income, rural population commutes by private vehicle, average commute time among this population is approximately 21 minutes, slightly longer than for suburban commuters but significantly *shorter* than for urban commuters. The NPTS data suggest that isolation from employment is likely highest, not surprisingly, for low-income persons without access to personal vehicles. The sample size of the NPTS is too small to analyze travel distance and time by mode for low-income respondents in rural areas. However, among all commuters, the average commute times of rural residents are long—30 miles and 1 hour.

Even so, these figures underestimate the spatial isolation of rural residents, since they include only those persons who are employed. Rural welfare recipients without access to automobiles are less likely to find employment compared to urban welfare recipients (Blumenberg, 2002).

Table 5.3 Commute Mode, Distance, and Time by Residential Location—Data from the Nationwide Personal Transportation Survey

Settlement Type	% Private Vehicle		Commute Distance (miles)		Commute Time (minutes)	
	All	Low-Income*	All	Low-Income	All	Low-Income
Rural	97%	95%	15	14	22	21
Suburban	94%	92%	12	10	23	19
Town	97%	93%	14	9	22	16
Second City	92%	86%	10	7	20	16
Urban	74%	58%	10	8	25	26

Source: 1995 Nationwide Personal Transportation Survey.
*Similar to Murakami and Young (1997) individuals are considered low-income if they live in households with 1-2 persons with household incomes under $10,000, or if they live in households with 3-4 persons with household incomes under $20,000, or if they live in households with 5+ persons with household incomes under $25,000.

5.7 Conclusions

These findings show a need for greater investments in transit that serves low-income, job-rich areas in the central parts of urban areas, where most transit systems already operate. They also suggest strengthening the transportation connection between low-income neighborhoods and job-rich areas with less intense job competition. One approach may be to implement reverse commute transit service from inner-city neighborhoods to outer suburbs. While long distance, reverse commute service may be feasible in some cases, in many instances suburban job densities are too low to support fixed-route public transit and travel times are too lengthy to sustain it. These trips may be better served by demand-responsive service and private vehicles.

These findings show is a need for transportation that serves low-income, job-rich areas in the central parts of urban areas, where most transit systems already operate. They also suggest strengthening the transportation connection between low-income neighborhoods and job-rich areas with less intense job competition. One approach may be to implement reverse commute transit service from inner-city neighborhoods to outer suburbs. It should be noted, though, that while this type of service may be feasible in some cases, in many instances suburban job densities are too low to support public transit and travel times are too lengthy to sustain it. It may be more promising to invest in services that better connect low-income and job-rich neighborhoods within the central city areas.

6. Geographic Access to Non-Work Destinations

Employment is predicated on being able to travel to and from the workplace; however, the commute cannot be considered in a vacuum. The employment stability of low-income workers depends not only on their ability to commute to and from job sites, but also on the ease of travel to an array of other household-supporting destinations. These destinations include child care centers, welfare offices, training centers, doctors' offices and health clinics, and many others. Without a car, even routine trips to the neighborhood grocery store or Laundromat can be difficult.

In general, non-work trips fall into three categories based on their frequency of occurrence (1) trips that recur daily, (2) trips that are less frequent but can be anticipated, and (3) trips that occur one-time or those that are emergencies. Sometimes travel to a single destination is relatively simple and problem-free. However, the challenge often lies in making the multiple trips necessary to the functioning of the household. For example, a welfare recipient may live quite close to her job, but if she is not able to travel easily to other household-sustaining destinations, her overall ability to maintain employment may be compromised.

Drawing from survey data on the travel behavior of low-income adults and data on the spatial location of child care centers, healthcare clinics, and welfare offices, we find that:

- Most trips taken by low-income adults are for personal or family reasons, rather than for the commute;
- Parents or relatives take care of approximately 70 percent of lower income preschool children with an employed parent;
- The percentage of child care centers located within ¼-mile from a transit line varies significantly across California counties;
- The average distance to the closest healthcare center varies substantially across California counties ranging from 55 miles in Inyo County to less than a mile in San Francisco; and
- Particularly for the transit-dependent, complex and time-consuming non-work travel can reduce the likelihood of employment; conversely, complex and time-consuming commutes can lead to foregone trips to important non-work destinations such as healthcare clinics or job training sites.

6.1 Trip Purpose

Transportation policies directed toward low-income workers almost always emphasize commute trips, yet such a narrow focus may be somewhat misdirected. As data from the 1995 Nationwide Personal Transportation Survey (NPTS) show (Table 6.1), even among higher income households, less than a fifth of all trips are commute trips. Among low-income households, only 15 percent of trips are to and from work. In contrast, almost half of all trips are for family-supporting purposes. Some of these differences can be explained by sex differences in travel patterns. As the data in Table 6.1 show, compared to men, women make a much higher percentage of household-serving trips and, therefore, a much smaller percentage of commute trips. This pattern reflects persistent sex differences in household responsibilities, with women expected to balance both paid employment and unpaid household responsibilities.

Table 6.1 Person Trips by Trip Purpose – Data from the 1995 NPTS

Purpose	Women	Men	Non-Low-Income Households	Low-Income Households
To/From Work	14.7%	20.7%	18.7%	15.1%
Work-Related Business	1.5%	3.8%	3.0%	1.6%
Family/Personal Business	50.5%	41.1%	44.8%	48.5%
School/Church	9.1%	8.5%	8.5%	9.3%
Social & Recreational	24.1%	25.7%	24.7%	25.3%
Other	.2%	0.1%	0.2%	0.1%
Source: Hu and Young (1999).				

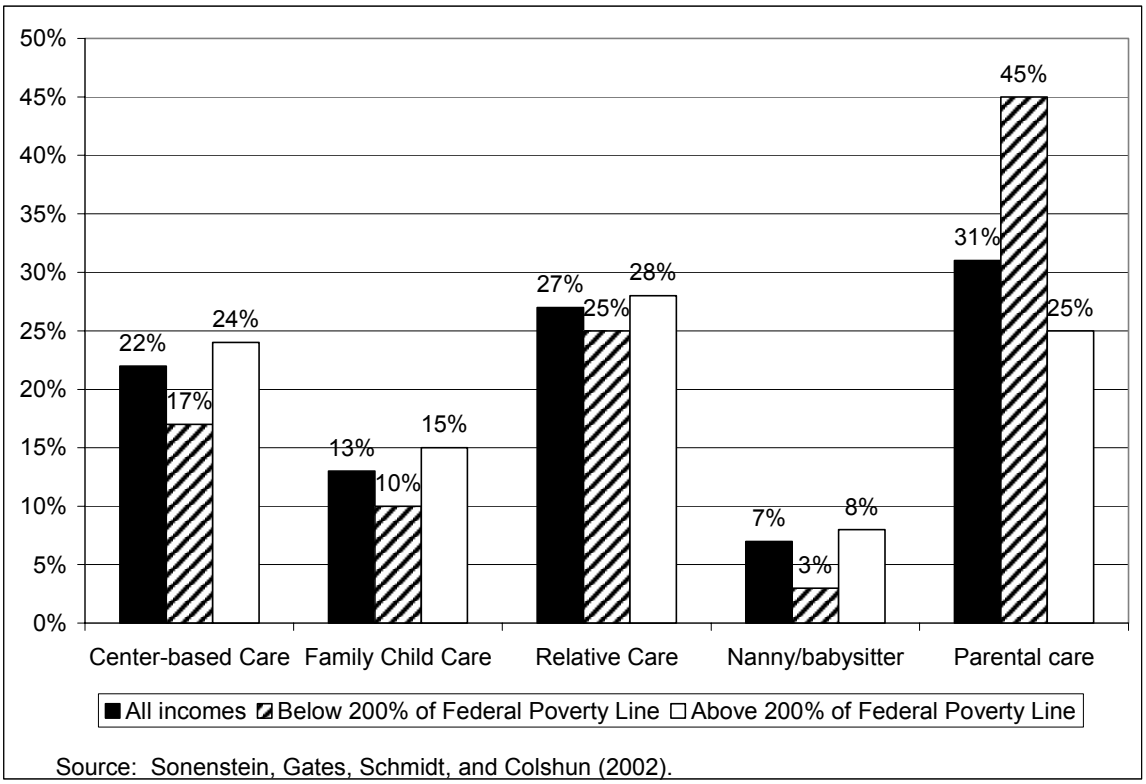
The policy focus on work trips is not surprising, given the current policy emphasis on "welfare-to-work," rapidly moving welfare recipients into the labor market. Unfortunately, this narrow view of travel behavior overlooks the possibility that difficulties in making non-work trips can adversely affect a person's ability to keep a job. Travel to many destinations—such as child care centers or job training sites—may be crucial to finding or sustaining employment.

The availability of private automobiles is an important factor in understanding how easily individuals can access non-work destinations. Automobiles provide drivers with great flexibility, allowing them to easily travel to almost any destination, to travel to multiple destinations in a single tour, and to travel safely at any time of day or night. In contrast, transit dependent adults often constrain their daily activities to more easily accessible locations, those that are either located close to their homes or in close walking distance from transit stops. We have already seen that this can limit employment opportunities; it can also limit access to employment-support services, health care, and consumer goods.

6.2 Travel to Child Care

The relationship between child care and the employment outcomes of working mothers has been extensively examined. Studies show that access to child care leads to improved employment outcomes – higher employment rates (Blau and Tekin, 2001; Kimmel, 1995) and lower job turnover (Hofferth and Collins, 2000). Studies also show that California faces a shortage of affordable child care (Fuller, Boots, Castilla, and Hirschberg, 2002). However, very little research has examined whether transportation is an obstacle to welfare recipients in their search for or use of child care.

Figure 6.1 Primary Child Care Arrangements of Preschool Children with an Employed Parent by Income, California



Source: Sonenstein, Gates, Schmidt, and Colshun (2002).

The type of child care used almost certainly affects child care-related travel. Many low-income workers rely on informal child care provided by relatives or friends, rather than care from licensed child care providers. Low-wage workers tend to live close to informal providers, potentially easing the daily travel burden. Among families with preschool children, two-parent families are less likely to use center-based or family care than single-parent families and are more likely to use parental care (Sonenstein et al., 2002). However, within each of these family types, lower-income families less frequently rely on center-based or family child care. Figure 6.1 shows the primary child care arrangements of preschool children with an employed parent by income defined as above and below 200 percent of the federal poverty line (FPL). The data show that low-

income families in California are less likely to use all types of formal child care than higher-income families and are much more likely to rely on parental care. Table 6.3 shows similar data for welfare recipients in Los Angeles and Fresno counties. Seventy percent of recipients in these two counties relied on either paid or unpaid friends, relatives, or neighbors for child care.

For low-income parents who use licensed care, the accessibility of the center to public transit may be an issue. As Table 6.2 shows, in urban counties, almost three quarters of all licensed child care centers are within a quarter mile of a transit line. However, this percentage is much lower in the less urban counties. In rural counties, for example, only 12 percent of child care slots are located within a ¼-mile of a transit line. The supply of licensed child care centers is positively correlated with household income.[28] Parents who reside in wealthier communities have access to three times as many enrollment opportunities compared to those living in blue-collar and middle-class neighborhoods (Fuller, Kipnis, and Siegel, 1998). Survey data from Los Angeles show that the relative supply of nearby licensed child care slots increases the likelihood that families use licensed care rather than other types of care but did not affect overall child care usage rates (County of Los Angeles, 2000).

Table 6.2 Proximity of Licensed Child Care to Transit Lines

	Within 1/4-mile of public transit	**Total slots***	**Slots per 100 children Ages 0-13****
California	67%	800,429	NA
County Type			
Urban	74%	600,987	NA
Mixed	52%	126,911	NA
Rural	12%	10,825	NA
Agricultural	39%	61,706	NA
County			
Alameda	78%	41,800	32
Alpine	0%	0	103
Amador	28%	341	28
Butte	58%	3,611	26
Calaveras	0%	304	22
Colusa	0%	682	26
Contra Costa	62%	31,464	29
Del Norte	10%	474	29
El Dorado	13%	3,244	20
Fresno	75%	13,026	22
Glenn	0%	362	32
Humboldt	55%	2,455	37
Imperial	0%	3,633	26
Inyo	0%	210	30

[28]It is difficult to determine, however, the extent to which the lack of licensed child care slots in certain neighborhoods is due to differing parental preferences for child care.

Kern	22%	13,495	20
Kings	27%	1,878	20
Lake	0%	657	19
Lassen	64%	351	26
Los Angeles	82%	227,388	16
Madera	0%	2,160	20
Marin	53%	7,293	39
Mariposa	0%	224	31
Mendocino	0%	1,024	22
Merced	60%	3,744	21
Modoc	0%	250	40
Mono	0%	60	29
Monterey	59%	8,565	20
Napa	74%	3,028	26
Nevada	25%	2,281	27
Orange	74%	60,312	14
Placer	22%	7,630	33
Plumas	0%	392	31
Riverside	52%	30,391	17
Sacramento	61%	30,005	25
San Benito	0%	1,323	17
San Bernardino	51%	37,291	15
San Diego	56%	69,720	26
San Francisco	99%	18,693	41
San Joaquin	46%	12,917	21
San Luis Obispo	40%	5,740	27
San Mateo	89%	17,937	26
Santa Barbara	56%	9,519	24
Santa Clara	82%	51,084	25
Santa Cruz	67%	3,919	37
Shasta	47%	4,444	26
Sierra	0%	0	28
Siskiyou	0%	564	28
Solano	66%	8,000	24
Sonoma	62%	10,301	28
Stanislaus	55%	10,743	22
Sutter	0%	2,388	34
Tehama	0%	788	23
Trinity	0%	14	32
Tulare	45%	8,282	22
Tuolumne	0%	685	26
Ventura	55%	17,760	23
Yolo	56%	4,453	33
Yuba	0%	1,130	26

*These represent licensed child care facilities with at least eight slots. Note that these data do not account for all licensed child care facilities.
**Source: California Child Care Resource and Referral Network (2000). Child care slots per 100 children with working parents.

Some child care providers offer transportation services to their clients and assist working parents with mid-day transportation for their school-age children. In the Los Angeles County Child Care Needs Assessment, Burr and Hirshberg (2000) found that 53 percent of family child care homes and 15 percent of child care centers in Los Angeles offered transportation services; however, these centers serve only 4 percent of those families needing child care.

Finally, the bottom half of Table 6.3 reports the percentage of welfare recipients in Fresno and Los Angeles who report difficulty traveling to child care. The data show that child care travel is much more difficult for welfare recipients who are engaged in job search and those who commute by public transit. The evidence on the relationship between type of care and the ease of child care travel is ambiguous. In Fresno, welfare recipients who travel to child care centers report more difficulties than those who rely on relatives, friends, and neighbors; in Los Angeles, the reverse is true. It is important to note that these data do not address emergency child care needs. Emergencies are unpredictable by definition, yet parents must anticipate the possibility of making unexpected trips to pick up their children at a moments' notice. The potential for emergency trips can greatly increase the difficulty of travel as well as motivate low-wage workers, particularly single mothers, to find jobs in close proximity to their children.

Table 6.3 Type of Child Care and Difficulty of Child Care Travel, Fresno and Los Angeles Counties

	Fresno*	**Los Angeles****
Type of Care (among those who used care)		
Child Care Centers	28%	23%
Family Homes		12%
Paid Friends, Relatives, Neighbors	41%	37%
Unpaid Friends, Relatives, Neighbors	31%	23%
% Reporting Difficult Child Care Travel		
Employment Status		
Employed	14%	19%
Job Search	26%	44%
Mode		
Private Vehicle	18%	24%
Public Transit	50%	50%
Type of Care		
Relative, Friend, Neighbor (paid/unpaid)	15%	29%
Child Care Center	23%	21%

*Data for Fresno are from Blumenberg (2002).
**Data for Los Angeles are from County of Los Angeles (2000).

6.3 Travel to Healthcare

Like employment, numerous barriers—such as the lack of health insurance (Brown, Ojeda, Wyn, and Levan, 2000)—prevent low-income workers from receiving adequate healthcare. Some studies also point to transportation as a significant barrier to the receipt of healthcare (Ahmed, Lemkau, Nealeigh, and Mann, 2001; Friedrich, 2001). Geographic distance from employment can affect healthcare use (Guidry, Aday, Zhang, and Winn, 1997); so too can the lack of public or private transportation resources (Heckman, Somlai, Peters, Walker, Otto-Salaj, Galdabini, and Kelly, 1998). Numerous studies also report the difficulties of making healthcare trips in the context of very demanding schedules. Brown, et al. (2000) cite conflicts with child care or other obligations as significant barriers to receiving healthcare, and Mofidi et al. (2002) suggest that even when the subjects of their study were able to find healthcare, the logistics of juggling their schedules to allow healthcare visits posed a substantial burden.

Most significantly, however, some studies find that patients sometimes forego treatment altogether due to transportation barriers (Guidry, Aday, Zhang, and Winn, 1997; Pesata, Pallija, and Webb, 1999; Flores, Abreu, Olivar, and Kastner, 1998). Foregone treatment can have dire health consequences for patients. It can also lead to higher medical costs as patients neglect preventive care or ignore minor health problems ultimately leading to more serious health problems and more expensive care.

To examine welfare recipients' spatial access to healthcare, we measure the average and median distance from their residences to the nearest healthcare clinic for all of the geocoded welfare recipients included in this study.[29] As with the other analyses in this section, we assume that the nearest clinic is the most appropriate clinic (i.e., that the recipient can both afford the clinic's services and is able to schedule appointments). In fact, some clinics may not be as available to our target population as others, and therefore these results likely underestimate mean and median travel distances.

The figures reported in Table 6.4 show that in most counties the average or median distance to the nearest healthcare clinic is relatively short with a statewide average of approximately 2¼ miles. One half of all welfare recipients in California lives 1 1/5 miles or less from a clinic. Of course, this relationship varies by county and county type. In rural counties, the distance to the nearest clinic can be very long – on average 8.1 miles, while the average distance in urban counties is less than two miles. Welfare recipients in compact San Francisco have the shortest average distance to the nearest clinic, with an average of just over ½ mile. In contrast, welfare recipients in Inyo and Modoc counties face the longest average distance, over fifty miles.

[29]Data for clinics were obtained from the California Office of Statewide Health Planning and Development's 2000 Primary Care Utilization Report of Primary Care Clinics.

Table 6.4 Distance to Healthcare Among Welfare Recipients

	Average Distance	Median Distance
California	2.26	1.21
County Type		
Urban	1.96	1.11
Mixed	2.75	1.55
Rural	8.15	3.29
Agricultural	2.85	1.49
County		
Alameda	1.00	0.70
Alpine	15.55	15.73
Amador	7.59	4.84
Butte	1.84	1.11
Calaveras	15.36	15.80
Colusa	2.86	0.57
Contra Costa	1.89	1.29
Del Norte	1.84	1.31
El Dorado	7.98	7.36
Fresno	2.33	1.71
Glenn	1.00	0.78
Humboldt	3.27	1.74
Imperial	1.81	.90
Inyo	55.62	55.93
Kern	3.02	1.29
Kings	8.41	8.34
Lake	9.61	9.97
Lassen	2.06	0.44
Los Angeles	1.25	0.98
Madera	4.50	1.42
Marin	2.27	1.59
Mariposa	7.91	6.77
Mendocino	4.60	1.89
Merced	2.50	1.31
Modoc	54.31	57.87
Mono	42.13	40.20
Monterey	1.89	1.03
Napa	2.41	1.15
Nevada	3.17	1.67
Orange	1.66	1.50
Placer	3.74	2.45
Plumas	36.52	35.67
Riverside	3.31	2.61
Sacramento	2.25	1.97
San Benito	1.84	1.26
San Bernardino	7.11	2.79

San Diego	1.25	0.92
San Francisco	0.54	0.50
San Joaquin	1.43	1.16
San Luis Obispo	3.36	1.64
San Mateo	2.04	1.40
Santa Barbara	6.52	1.05
Santa Clara	1.57	1.03
Santa Cruz	1.88	0.88
Shasta	2.19	1.35
Sierra	13.84	14.17
Siskiyou	15.76	18.18
Solano	2.02	1.40
Sonoma	1.78	1.22
Stanislaus	3.39	1.63
Sutter	1.90	0.71
Tehama	6.81	4.70
Trinity	23.20	23.20
Tulare	2.37	1.47
Tuolumne	4.65	4.24
Ventura	1.81	1.32
Yolo	2.87	2.15
Yuba	2.02	1.65

6.4 Travel to Social Services

Very little research has been done on low-income individuals and their spatial access to social services. In one of the few studies on this topic, Nonaka (2001) finds that welfare recipients in Alameda County have relatively good access to community colleges and community-based organizations (CBOs) that provide services to low-income families. She determined that 71 percent of welfare recipients live within 5 miles from at least one community college and that 88 percent live within 1 mile from at least one community-based organization. She also concluded that welfare recipients who live close to CBOs have better access to public transit than those who are more isolated. However, she notes that it is difficult to determine the connection between the needs of welfare recipients and the availability of services provided by CBOs and community colleges.

Low-income workers seeking public welfare assistance have specific non-work travel needs—welfare offices, one stop centers, and job clubs—related to the receipt of benefits. In most counties, families cannot receive public assistance without first traveling to county welfare offices. For example, in Los Angeles, a welfare recipient has to travel to the CalWORKs district office for an initial appointment with an intake eligibility screener (to determine her eligibility) and then with an intake eligibility worker who informs new applicants about program benefits, requirements, and services. Table 6.5 shows the average distance to the closest welfare office for welfare recipients living in five diverse counties. Not surprisingly, this distance is relatively short in the three

urban counties, although slightly longer in Los Angeles than Alameda or Sacramento. The distance to the closest welfare office is 5 miles in Fresno and 6.3 miles in El Dorado.

Table 6.5 Average Distance to Closest Welfare Office

County	County Type	Distance (miles)
Alameda	Urban	2.3
El Dorado	Rural	6.3
Fresno	Agricultural	5.0
Los Angeles	Urban	3.1
Sacramento	Urban	2.4

Despite increases in the number of one-stop centers and other administrative efforts to reduce recipients' need to visit county welfare offices, the ability to get to welfare offices remains directly related to the receipt of benefits. Counties have attempted to ease the travel burden associated with welfare receipt by consolidating service centers into 'one-stop' centers. While this strategy may reduce the number of trips welfare recipients' must take, it also decreases the total number of locations and, therefore, likely increases average travel distance to service centers.

6.5 Travel to Other Destinations

Travel to many other types of destinations can also be problematic. Even the most basic trips such as those to grocery stores can be difficult. Many inner-city areas suffer from under-investment by major grocery and retail chains in part because these areas are identified as high crime areas and poor neighborhoods in which to conduct business. Businesses may prefer to locate in outlying suburban neighborhoods; however, in these neighborhoods most destinations assume access to automobiles. For the transit dependent, carrying home purchases such as household groceries or other large consumer items can be next to impossible. These trips are often made using borrowed cars or by taxi.

6.6 Conclusions

Given existing data sources, it is impossible to identify which low-income adults can easily access all of their typical destinations and which cannot. As with employment, an important indicator of access is the relative availability of private vehicles. We do know, however, that the complexity of travel increases in proportion to the number of destinations that must be reached, particularly for those without access to automobiles. There is also evidence that reduced public funds has and/or will result in the closure of public health care clinics, social service agencies, and employment training centers, ultimately increasing travel distances to significant destinations. Therefore, the strain of finding transportation for different trip purposes, to different geographic locations, and at different times of the day or week can, in the worse cases, lead to lost employment opportunities, forgone health care, and missed appointments.

Finally, it is important to acknowledge that although longer commutes to neighborhoods of relatively high job availability may improve the employment prospects of low-income workers, longer commutes can also increase the difficulty of reaching other important non-work destinations. Effective transportation policymaking for the poor must facilitate both work and non-work travel.

7. Travel Mode: The Relationship between Public Transit, Automobiles, and Employment

If transportation is a barrier to finding employment, it is a barrier of unequal height for different individuals. Those with access to automobiles can reach many jobs within a reasonable commute time regardless of where they live. Those without access to automobiles face far stricter constraints. But cars are not silver bullets; they do not necessarily overcome the transportation barriers faced by the poor. Cars can make travel easier but they can also create additional problems, such as difficulty gaining reliable access to vehicles or burdensome costs.

Although most low-income adults use cars as their principal mode of travel, many cannot afford to purchase automobiles and have difficulty either borrowing them or carpooling with others. For this group, public transit may be the only link to the labor market or employment services. Most urban residents have relatively convenient access to public transportation, and live within an easy walk to transit lines where buses run regularly. In suburban and rural areas, transit is less available and, therefore, less accessible, since lower residential and employment densities do not support extensive transit networks like those found in many central cities. The lack of transit forces most rural and suburban low-income commuters to rely on personal vehicles. Naturally, those without cars tend to be the most isolated from employment.

Without knowing the travel needs, transportation resources, and neighborhood characteristics of each low-income adult in California, it is difficult to identify who and how many are spatially isolated from jobs or services. However, data on (a) spatial proximity to transit lines, (b) relative access to jobs by mode, and (c) transit mode and auto availability across California places allow us to better target neighborhoods for additional analysis and, perhaps, particular types of transportation investments.

The key findings of this section include the following:

- Areas with the population densities sufficient to support fixed-route public transit are located in major urban areas, and most of these already have extensive public transit networks;

- With the exception of a few dense, urban areas, the percentage of work trips taken on public transit is below 5 percent;

- In urban and mixed counties, a majority of low-income residents live close to public transit lines; however, in rural and agricultural counties with relatively little fixed-route transit, most low-income residents live more than ¼-mile from a transit line;

- Low-income residents who live in the central part of Los Angeles have good access to employment within a 30-minute commute on public transit. However, those who

have access to automobiles, regardless of where they live, can access almost all low-wage jobs within a 30-minute commute;

- On the whole, those with access to automobiles tend to commute to work by driving; and it is disproportionately those without cars who use transit or rely on alternative modes of transportation such as walking;

- Access to automobiles has a much stronger effect on employment rates than does access to public transit; and

- Carpooling plays an important role in places with large Hispanic populations, particularly in the agricultural counties.

7.1 The Role of Fixed-Route Public Transit

Understanding the role of public transit in transporting low-income workers is critical for making transit-related investment decisions. For many poor workers, transit enables them to forego the expenses associated with buying and operating private vehicles. In spite of its *relative* importance, however, fixed-route transit serves only a small minority of all workers. Although 78 percent of the welfare recipients included in this study, and approximately 72 percent of all people earning less than 150 percent of the federal poverty line, live within a quarter mile of a transit line, data from the 1990 census indicate that only about 10 percent of low-wage workers actually commute using public transit.[30]

Transit usage is somewhat larger when surveys ask about it more broadly—beyond just commuting, in other words. For example, in a transportation survey of welfare recipients in Fresno County, only 13 percent of the respondents reported using transit for the commute to work; however, over 30 percent reported having used it at least one day in the week prior to the survey (Blumenberg, 2002). It is likely, therefore, that many welfare recipients "transportation package" use different modes of transportation for different types of trips.

The decision to make a trip on public transit can be thought of in the following way: a trip will be made on transit if it is possible to reach the desired destination in a reasonable amount of time, and if no other competing mode offers the trip in a similar time at a competitive price.[31] In practice, this means that transit trips are more likely to

[30]Welfare recipient estimates are based on the geocoding performed for this study in combination with bus line shape files produced for the FTA and maintained by Bridgewater State College. Estimates for the population earning below 150% of the poverty line come from the 2000 STF-3 data and use block group centroids within a ¼-mile of a transit line. Commute mode is estimated from 1990 Public Use Microdata Sample of the U.S. Census.

[31]Mode split models can take the following form $P_n(i) = prob(Y_n = i) = \frac{e^{V_{ni}}}{\sum_{j \in C_n} e^{V_{nj}}}$

be made in dense urban areas where there are many nearby destinations, and where there is also a high competing cost of car travel (due to factors such as congestion and limited parking).

The relationship between residential characteristics and transit use is complex, given the nature of travel by transit, but a few key factors may be identified. In general, density is correlated with transit use; the greater the population density, the higher the percentage of residents that use public transit (Center for Urban Transportation Research, 1998; Ross and Dunning, 1997). Interpreting these data is difficult since they also reflect the high concentrations of captive riders—largely low-income adults in households without personal vehicles—residing in central cities. The question inevitably arises as to whether it is density *per se* that leads to increased transit trips, or whether high transit use is simply a function of the high concentrations of transit-dependent adults living in dense neighborhoods. However, the relationship between density and transit use persists even controlling for household income.

A study sponsored by the Transportation Research Board reviewed research addressing the relationship between density and transit use. Although no conclusive minimum density standards exist, most studies suggest that at least 7,500 persons per square mile are required to support fixed-route transit (Parsons, Brinckerhoff, Quade & Douglas, Inc., 1996). Dense residential neighborhoods must also be paired with dense destinations. Because transit is strongly linked to work trips, employment centers in reasonable proximity to residential neighborhoods are required before fixed-route transit is feasible.

To examine whether existing public transit serves dense residential neighborhoods, we combine data on residential density and commute mode. For the purpose of our study, we use a conservative figure, 5,000 people per square mile, as the lower threshold for identifying areas where transit is likely to be efficient. Map 7.1 shows residential density calculated at the block group for the entire state. The shading indicates that, apart from the urban centers, few block groups exceed the 5,000 person per square mile figure. Not surprisingly, when we overlay known transit lines over these areas, almost every transit line corresponds to areas of high residential density.

Map 7.2 shows commute data for all employed workers. With the exception of a few urban areas (notably parts of San Francisco), the percentage of work trips taken on transit is below 5 percent in all parts of the state. Most of the low-density areas identified in Map 7.1 have low levels of existing transit usage. Yet there are a few areas in which *relatively* large percentages of people report using transit, in spite of low overall residential densities. In these areas, high levels of transit use might be explained by large employers or, perhaps, very localized residential concentrations, conditions that are not

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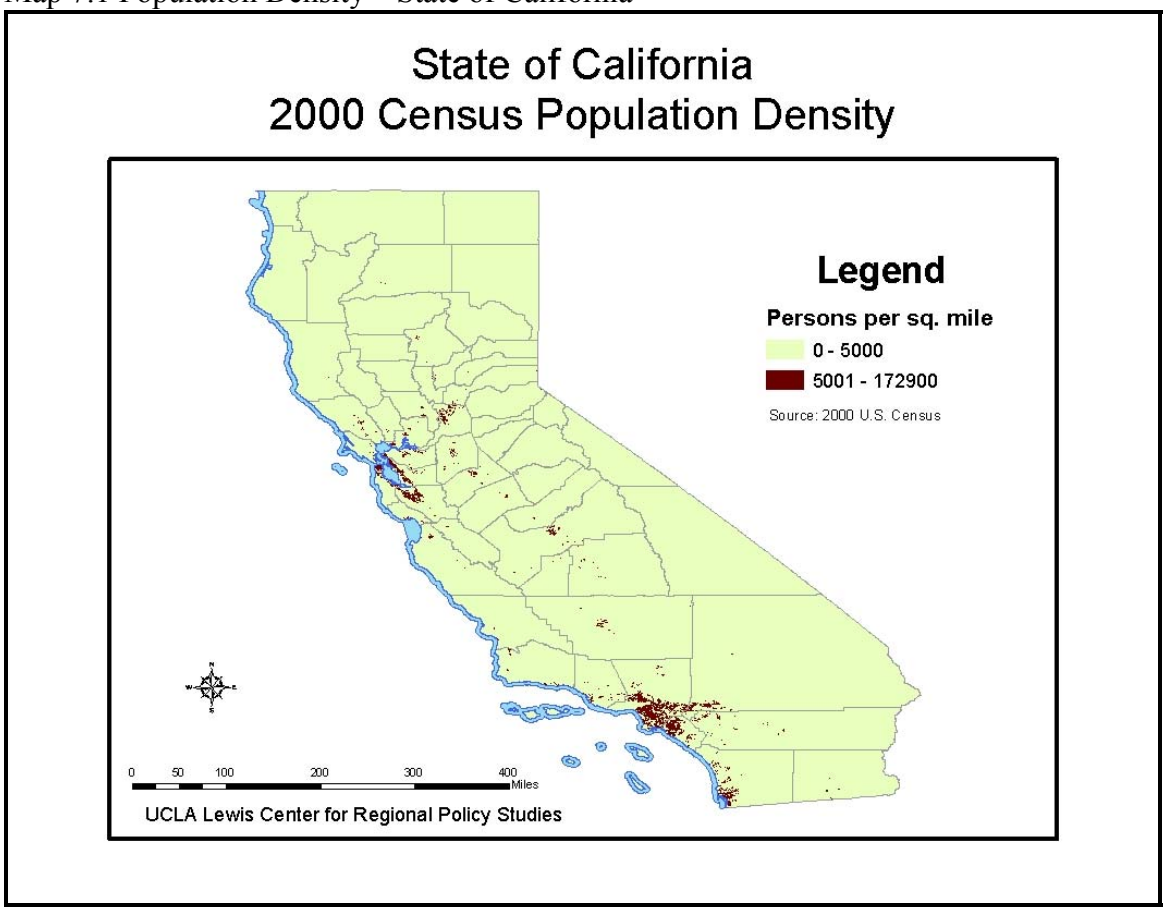
where $P_n(i)$ is the probability with which person n will choose mode alternative i; Y_n is the value of the response variable for individual n, C_n is the set of alternatives in person n's choice set; and V_{nj} is the measurable component of the utility of alternative i for individual n. Utility (V_{nj}) typically includes variables such as travel times by automobile and by transit, terminal times, parking costs, and transit fares. See Zhao et al. (2002) for a description of four-step demand models.

reflected in aggregate, block-group data. They may also reflect the use of demand-responsive service or employer-operated shuttles, which are not included in our transit-line database.

Map 7.1 Population Density – State of California

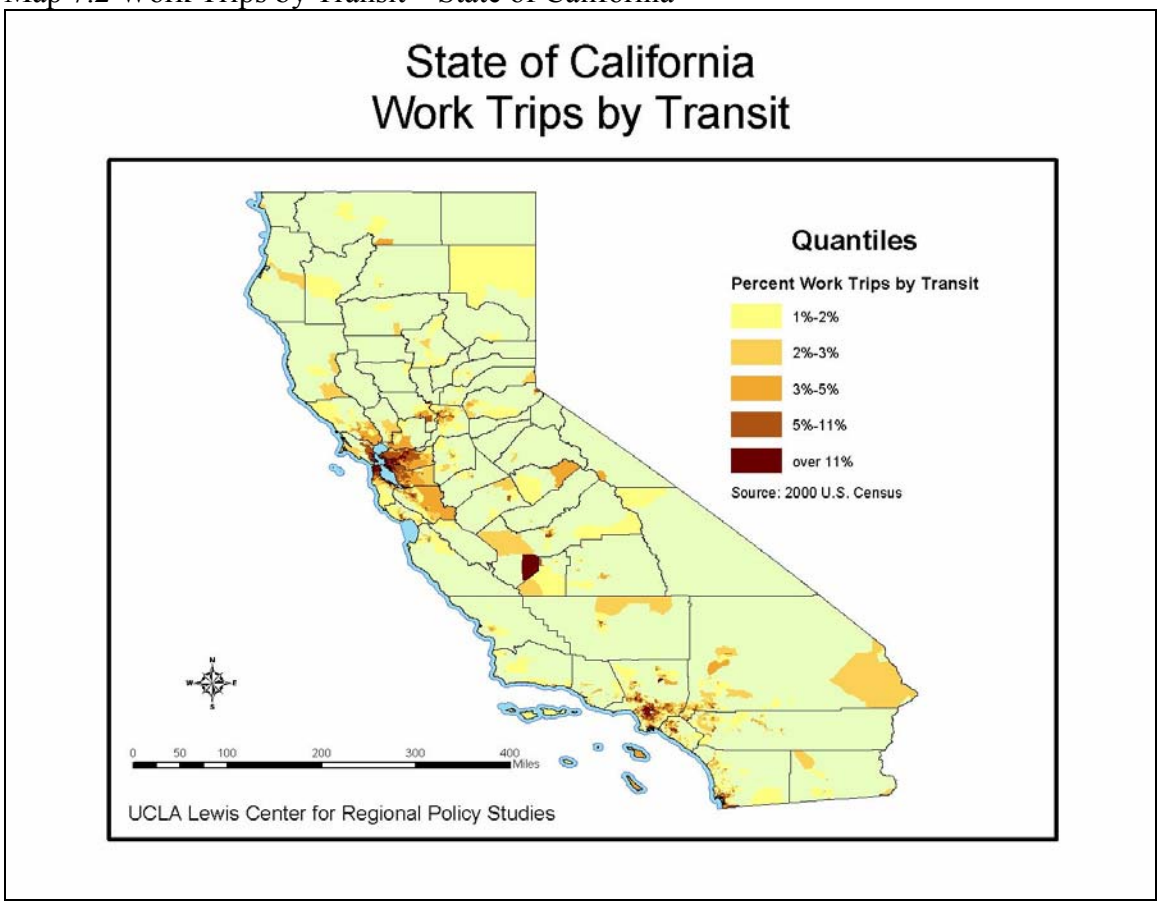


We also know that individuals are more likely to use public transit if it is convenient. One measure of convenience, and clearly not the only measure, is the distance between home and transit stops. The evidence suggests that the further the distance, the less likely that transit will be used; and conversely, greater physical access to public transit results in an increased likelihood that it will be used (Bernick and Cervero, 1997; Cervero, 1994; Hsiao et al., 1987; Lam and Morall, 1982; Levinson and Brown-West, 1984). Table 7.1 shows the percentage of CalWORKs recipients, low-income residents and low-wage jobs located within ¼-mile from a transit line.[32] The table shows wide disparities in the percentages across the 58 counties. As the subsequent table (Table 7.2) shows, approximately three-quarters of the urban poor (adults 150% of poverty) live within a ¼-mile from a transit line. More than one-half of the poor in mixed counties live within a ¼-mile from a line. As might be expected, in rural and

[32]It is preferable to estimate the percentage of the poor who live within a ¼-mile from a bus stop rather than the bus line; however, these data were not easily available for all transit systems in California.

agricultural areas, where there is relatively little fixed-route public transit, the percentage drops to less than 20 percent. Welfare recipients are more likely to live in urban areas, even in agricultural counties, for example. Therefore, on average, a much higher percentage live closer to public transit compared to all low-income adults.

Map 7.2 Work Trips by Transit – State of California



In the urban and mixed counties, transit does a better job of reaching low-income residents than it does low-wage jobs. In most of these counties, employment tends to be more dispersed than low-income households, which makes it difficult for fixed-route transit to easily connect the two.

Table 7.1 Percentage of Low-Income Residents and Low-Wage Jobs Located ¼-Mile from a Transit Line

County	County Type	Percentage within 1/4-miles from a transit line		
		CalWORKS Recipients	150% of Poverty	Low-Wage Jobs
Alameda	Urban	91%	90.6%	74.9%
Alpine	Rural	0%	0.0%	0.0%
Amador	Rural	11%	2.7%	2.3%

Butte	Mixed	55%	41.1%	47.6%
Calaveras	Rural	0%	0.0%	0.0%
Colusa	Agricultural	0%	0.0%	0.0%
Contra Costa	Urban	76%	74.3%	67.9%
Del Norte	Rural	19%	16.0%	33.6%
El Dorado	Rural	16%	7.7%	21.2%
Fresno	Agricultural	82%	70.9%	57.0%
Glenn	Agricultural	0%	0.0%	0.0%
Humboldt	Mixed	62%	42.8%	50.9%
Imperial	Agricultural	0%	0.0%	0.0%
Inyo	Rural	0%	0.0%	0.0%
Kern	Agricultural	27%	28.1%	27.6%
Kings	Agricultural	38%	34.3%	41.1%
Lake	Rural	0%	0.0%	0.0%
Lassen	Rural	36%	16.7%	48.7%
Los Angeles	Urban	90%	90.3%	83.3%
Madera	Agricultural	0%	0.0%	0.0%
Marin	Urban	69%	48.6%	57.2%
Mariposa	Rural	0%	0.0%	0.0%
Mendocino	Rural	0%	0.0%	0.0%
Merced	Agricultural	73%	55.9%	58.0%
Modoc	Agricultural	0%	0.0%	0.0%
Mono	Rural	0%	0.0%	0.0%
Monterey	Agricultural	60%	47.7%	48.8%
Napa	Mixed	73%	63.7%	52.6%
Nevada	Rural	41%	27.3%	40.1%
Orange	Urban	89%	84.6%	80.1%
Placer	Mixed	44%	31.7%	40.0%
Plumas	Rural	0%	0.0%	0.0%
Riverside	Mixed	55%	54.8%	49.5%
Sacramento	Urban	67%	68.3%	63.3%
San Benito	Agricultural	0%	0.0%	0.0%
San Bernardino	Urban	65%	58.6%	60.8%
San Diego	Urban	68%	67.0%	58.9%
San Francisco	Urban	99%	98.6%	99.4%
San Joaquin	Mixed	74%	62.2%	36.4%
San Luis Obispo	Mixed	35%	46.3%	41.4%
San Mateo	Urban	94%	90.9%	83.9%
Santa Barbara	Mixed	53%	62.9%	60.0%
Santa Clara	Urban	83%	84.4%	81.5%
Santa Cruz	Mixed	74%	73.3%	64.8%
Shasta	Mixed	55%	46.7%	63.5%
Sierra*	Rural	0%	0.0%	0.0%
Siskiyou	Rural	0%	0.0%	0.0%
Solano	Urban	75%	62.6%	54.7%
Sonoma	Mixed	66%	57.0%	54.6%
Stanislaus	Mixed	65%	56.8%	54.7%
Sutter	Agricultural	0%	0.0%	0.0%

Tehama	Agricultural	0%	0.0%	0.0%
Trinity	Rural	0%	0.0%	0.0%
Tulare	Agricultural	34%	24.2%	35.1%
Tuolumne	Rural	0%	0.0%	0.0%
Ventura	Mixed	69%	67.6%	53.0%
Yolo	Mixed	81%	68.6%	57.9%
Yuba	Agricultural	0%	0.0%	0.0%
Source: MEDS; 2000 Census.				

Table 7.2 Percentage of Low-Income Residents and Low-Wage Jobs Located ¼-mile from a Transit Line, by County Type

County Type	Percentage within 1/4-miles from a transit line (average across county)			Total Persons on CalWORKs (September 2002)	% of CalWORKs Recipients
	CalWORKS Recipients	150% of Poverty	Low-Wage Jobs		
Agricultural	46%	17%	18%	197,814	16%
Mixed	62%	55%	52%	167,185	13%
Rural	10%	4%	9%	19,609	2%
Urban	83%	77%	72%	868,737	69%
Source: MEDS; 2000 Census.					

There are some neighborhoods where there appears to be gaps in transit service. These are areas where the population densities are high enough to support public transit, but yet do not appear to be served by public transit. These neighborhoods can essentially be divided into two categories: 1) areas in the vicinity of existing transit services that are over a quarter mile from a transit line, and 2) isolated areas that do not seem to be served by any transit. We have generated a list of these census tracts, and consider them areas that may—based on additional study—support expanded public transit service. (See Appendix D).

Gaps are normally thought of as the absence of transit service where it should or could be, but it may be appropriate to rethink this definition. A gap can also be thought of as an area of poor or infrequent service. In areas with relatively extensive transit systems, targeted enhancements to the existing transit network may allow low-income riders to more easily search for and maintain jobs as well as travel to other household-supporting destinations. In these largely urban areas transit riders often complain about lengthy waits at transit stops, limited off peak service, and long travel times (Blumenberg, 2002; County of Los Angeles, 2000). Therefore, detailed service planning is necessary to measure the frequency of transit service, transit ridership as it relates to service hours, and travel times from dense residential neighborhoods to employment centers.

Fixed-route transit, as it is traditionally understood, is probably a poor fit in most areas where it does not already exist. This does not imply, however, that there is no need for public transportation in these areas. In neighborhoods where residential and employment densities cannot support fixed-route transit, demand-responsive transportation—flexibly organized vanpools and shuttles that are provided on request—may be effective. However, most of these programs have yet to undergo extensive empirical evaluation. Experience with paratransit service provided largely for the elderly and disabled shows that demand-responsive programs can be costly. Data from the 2000 National Transit Profile present the relative cost effectiveness of public transit by mode. According to these data, the operating expense per unlinked passenger trip for demand-responsive service is $16.74, approximately eight times as that for bus ($2.19) or light rail ($1.89).

Do gaps in transportation provision, and especially in transit service, exist? Almost certainly. But it is difficult to generalize about the solutions that best fill these gaps. Detailed service planning must take place using information far more specific than that which is available for a statewide analysis. At best, this report can point to areas that may have unmet transportation needs.

7.2 The Role of Private Vehicles

Over the past century, zoning and other land use policies have supported and subsidized individual automobile users. Therefore, it should come as no surprise that work travel is, in most cases, most effective when done in private automobiles. The benefits of automobile travel are obvious. Among others, cars give flexibility in time of departure (including late at night and early morning), allow easy trip chaining to multiple destinations, and offer a level of personal security. However, the benefits of automobile ownership come at a price. The initial purchase cost of a vehicle is substantial, and poses a significant barrier to the poor, who are unlikely to have adequate income and who are likely to pay more for loans because of bad credit history or lack of assets (Ong, 2002). Once a car is purchased, it continues to be a financial drain in the form of repairs, insurance, fuel, and other miscellaneous costs. In an ideal world, poor people would have the level of physical accessibility provided by cars, but without the corresponding burden of actual ownership.

The benefits of auto ownership in terms of spatial access to employment are demonstrated in Table 7.3 for Los Angeles and Alameda counties. Column 1 in Table 7.3 shows the relative number of low-wage jobs that can be reached within a 30-minute commute on public transit from neighborhoods with high concentrations of welfare recipients. The data show that within the central areas of the county such as downtown Oakland or the Pico Union neighborhood in Los Angeles, there are many jobs that are easily reached within a 30-minute commute on public transit. In the outlying areas, however, the number of jobs that can be reached is far lower. For example, a welfare recipient living in Monterey Park (east of downtown Los Angeles) can reach 70 times as many jobs in a 30-minute commute by car than she can by public transit; in Watts the

ratio is 59 to one. The data show that automobiles allow low-income residents excellent access to employment opportunities regardless of where they live.

Table 7.3 Access to Low-Wage Employment in Los Angeles and Alameda Counties – Neighborhoods with High Concentrations of Welfare Recipients

Neighborhood	Location	Accessible jobs within a 30-minute commute		Ratio of auto to public transit job accessibility (3)=(2)/(1)
		Public Transit (1)	Automobile (2)	
Alameda County				
Berkeley	North Alameda	31,517	144,644	4.6
Downtown Oakland	Central Alameda	105,557	138,292	1.3
Fruitvale, Oakland	Central Alameda	44,831	124,585	2.8
Hayward	South Alameda	5,665	136,399	24.1
Pleasanton	Southeast Alameda	3,870	112,379	29.0
Los Angeles County				
Boyle Heights	East Los Angeles	93,254	583,730	6.3
Monterey Park	East Los Angeles	5,966	418,581	70.2
Pacoima	San Fernando Valley	7,733	214,255	27.7
Pico Union	Central Los Angeles	118,990	615,700	5.2
Watts	South Los Angeles	8,001	468,561	58.6

Note: Data from the origin and destination matrices developed by the Metropolitan Transportation Commission and the Southern California Association of Governments is combined with data on low-wage jobs from the American Business Information (1999).

Source: Blumenberg and Hess (forthcoming).

7.3 Travel Mode in Census-Designated Places in California

Ideally, to determine the transportation barriers and needs of the poor in California, we would have information on the spatial location of low-income residents, employment, and services as well as data on the transportation resources of the poor. For example, we would know for each welfare recipient whether they had an automobile in their household, their relative access to automobiles, or whether they were transit dependent. If they were employed, we might also have information on their commute mode. However, outside of small, geographically-targeted surveys from which we have drawn, this type of information is not available.

However, data from the 2000 U.S. Census can be used to identify indicators of (a) travel mode and automobile availability, and (b) whether and to what extent transit use and automobile availability influence employment rates. To conduct this analysis we rely on census data aggregated to the census-designated place level (Map 7.3). The analysis includes 1,058 places with populations over 50 persons. We first examine the determinants of travel mode focusing on transit use, carpooling, and walking. As the results show, transit and auto availability are strongly associated. Transit use is based on

the availability of automobiles in the household, and transit agencies provide transit service based on its anticipated demand. We therefore examine automobile availability (the ratio of personal vehicles in the household to household members) as a function of the predicted value of public transit use as well as other variables. We then replicate this model separately for the four county types. Finally, we conclude the analysis by examining the relationship between mode and employment rates.

Map 7.3 Census-Designated Places in California

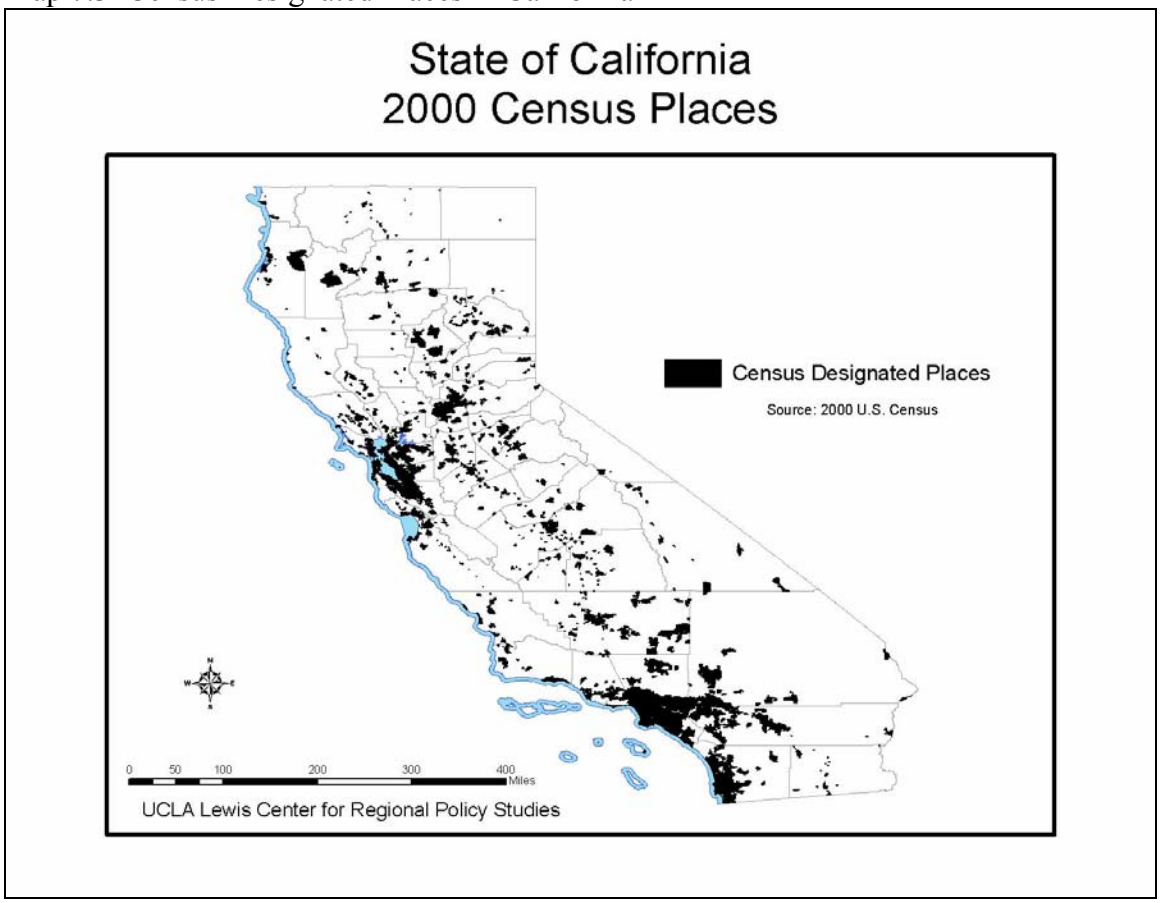


Table 7.4 presents the means for commute mode, auto availability, and employment rates for all places in California and by county type. Not surprisingly, transit use is highest in places located in urban counties (4%) followed by the mixed counties (1.3%). Transit use is almost negligible in places located in rural (.5%) and agricultural counties (1%). Carpooling is also significantly higher in agricultural counties than in the other county types. The number of automobiles per household member, however, looks remarkably similar across the four county types with the lowest ratio in the rural counties (1.4:1). Employment rates are highest in the urban and mixed counties and significantly lower in rural and agricultural areas.

Table 7.4 Means of Dependent Variables, Commute by Public Transit and Autos per Household Member

	Places				
	All Places	**Urban Counties**	**Mixed Counties**	**Rural Counties**	**Agricultural Counties**
Mode					
Drive	72.3%	73.3%	73.4%	71.7%	69.6%
Public Transit	2.2%	4%	1.3%	.5%	1%
Carpool	15.6%	13.6%	15.5%	14.9%	20.5%
Walk	3.4%	2.8%	3.1%	5.8%	5.8%
Autos/Household Member	1.6:1	1.7:1	1.6:1	1.4:1	1.5:1
Employment Rate	55%	60%	56%	50%	48%
# of places	1,058	436	261	146	215

Table 7.5 presents the determinants of driving, transit, carpooling, and walking as well as the means of the independent variables. The figures in bold are significant at or below .05 percent. The statistical models show that poverty rates are negatively related to the percent that commute by driving. In other words, controlling for other factors that influence commute mode, a smaller percentage of commuters drive in places with high poverty rates. However, poverty is not a statistically significant predictor of the three other commute modes.

In addition to poverty rates, the percent that drive is negatively influenced by household income, residence in older areas, the percentage of a population that is Hispanic, and location in an urban county. Age, household density, and the availability of cars in the household all positively predict driving. Transit is associated with dense urban areas. As the model shows, the percent commuting by public transit is positively related to household density, older areas, location in an urban county, and population size. The availability of household vehicles is negatively related to transit use. The implication of this model is that more people turn to public transit if automobiles are less available.

Carpooling is negatively related to education, age, household density, and older urban areas. The percent Hispanic strongly influences the percent of commuters that carpool, and, as a result, carpooling is particularly prevalent in agricultural areas that are predominantly Hispanic. Interestingly, the availability of automobiles has no statistically significant effect on carpooling rates. Carpooling appears to occur more frequently outside large urban areas and among less educated population groups. In contrast, walking occurs more frequently in places with older neighborhoods that have a younger, more educated population. Walking is also negatively related to the availability of household vehicles. Contrary to expectations, the percent of the population that commutes by walking is also negatively related to overall household density. Perhaps this can be explained by the fact that in dense urban areas, commuters are more likely to use public transit.

Model 2 in Table 7.5 shows the strong relationship between transit use and automobile availability. Therefore, we estimate automobile availability as a function of the predicted value of public transit use as well as other variables.[33] To model transit use we have developed a parsimonious model, drawing only from those variables that are strongly predictive of public transit use. Model 1 in Table 7.6 presents the results of the transit use model. All four of the independent variables are positively and statistically related to transit usage. Higher transit use is associated with greater household density, higher percentages of old housing stock and African Americans in the population, and an urban location. The predictive value of transit usage is then used to examine automobile availability. As Model 2 in Table 7.6 shows, the variables operate as one might expect. For example, higher household incomes are associated with greater access to automobiles and, conversely, higher poverty rates are associated with lower access to automobiles.

[33]Ideally, we would use a measure of transit availability rather than transit use. However, those data were not easily available.

Table 7.5 Determinants of Driving, Transit, Carpooling, and Walking

Independent Variables	Mean	Model 1 Drive		Model 2 Transit		Model 3 Carpooling		Model 4 Walking	
		Std. Estimate	Std. Error	Std. Estimate	Std. Error	Std. Estimate	Std. Error	Std. Estimate	Std. Error
Intercept		**0**	**0.054**	0	0.018	**0**	**0.039**	**0**	**0.028**
High school degree or higher	77%	0.105	0.0004	-0.061	0.0001	**-0.351**	**0.0003**	**0.244**	**0.0002**
Age	37	**0.142**	**0.001**	-0.004	0.0002	**-0.138**	**0.0004**	**-0.235**	**0.0003**
Household income	$49,327	**-0.115**	**0.0000002**	**0.128**	**0.0000001**	-0.033	0.0000001	-0.037	0.0000001
Poverty	11%	**-0.155**	**0.049**	0.015	0.016	0.066	0.036	-0.054	0.026
Population	29,461	0.011	0.00000002	**0.084**	**0.00000001**	-0.024	0.00000001	-0.030	0.00000001
Household density	767	**0.126**	**0.000006**	**0.409**	**0.000002**	**-0.130**	**0.000004**	**-0.273**	**0.000003**
Household density (squared)	1,308,800	-0.054	0.000000001	**-0.107**	**0.0000000004**	0.025	0.000000001	**0.126**	**0.000000001**
Old housing (% built prior to 1940)	9%	**-0.143**	**0.025**	**0.136**	**0.008**	**-0.047**	**0.018**	**0.257**	**0.013**
Black	4%	0.014	0.041	**0.097**	**0.014**	0.013	0.029	**-0.062**	**0.021**
Hispanic	27%	**-0.187**	**0.028**	0.001	0.009	**0.177**	**0.020**	0.112	0.015
Asian	0.4%	-0.051	0.537	**0.054**	**0.179**	**0.062**	**0.389**	-0.010	0.279
Household cars/ household member	1.6	**0.348**	**0.010**	**-0.134**	**0.003**	-0.052	0.008	**-0.380**	**0.005**
Urban county	41%	**-0.074**	**0.007**	**0.228**	**0.002**	-0.041	0.005	0.060	0.004
R^2		0.336		0.354		0.479		0.234	

Table 7.6 Estimation of Transit Usage and Auto Availability

Independent Variables	Model 1		Model 2	
	Transit Usage		Auto Availability	
	Parameter	Std. Error	Parameter	Std. Error
Intercept	**-0.003**	0.002	1.653***	0.037
Population size	**2.257E-8*** **	6.665E-9		
Households density (households per square mile)	**.00002*** **	.000002		
Household density (squared)	**-8.48E-10***	3.619E-10		
Old residential housing (% built prior to 1940)	**0.047*** **	0.008		
Black (% black population)	**.054*** **	.013		
Place in urban county	**0.017*** **	0.002		
Household income			0.000005***	3.904E-7
Poverty rate			-0.683***	0.110
Seniors (% 65+)			-1.424***	0.106
Transit (predicted value)			-1.718***	0.419
Place in rural county			-0.059*	0.025
R2	.337		.400	
Adjusted R2	.333		.397	
*p<.05, **p<.01, ***p<.001				

The key finding here, however, is that areas with ample transit use (where the predictive value of transit use is high) have lower rates of automobile availability. This finding supports efforts to broadly enhance transit as a strategy to lowering auto use. However, as Table 7.7 shows, this relationship is statistically valid only for places located in urban areas. In other words, among places in mixed counties, although the coefficient on the variable is negative, higher transit use has no statistically significant relationship to automobile availability. In rural and agricultural counties, the presence of transit is so minimal that this variable has been omitted from the analysis.

Table 7.7 Estimation of Automobile Availability by County Type

Independent Variables	**Urban**	**Mixed**	**Rural**	**Agricultural**
Intercept	1.683***	1.590***	1.825***	1.448***
Household income	0.000005***	0.000007***	-6.824E-8	0.000009***
Poverty rate	-0.962***	-0.453	-0.835*	-0.249
Seniors	-1.304***	**-1.313*** **	-1.619***	-1.684***
Transit (predicted value)	-1.416**	-4.845		
R2	.487	.363	.131	.370
Adjusted R2	.483	.353	.107	.358
*p<.05, **p<.01, ***p<.001				

Finally, both the predictive value of transit use and automobile availability are used to determine employment rates. Transit use and automobile availability are both positively and statistically associated with employment rates. Historically, transit use is positively related to the unemployment rate, perhaps because a robust economy pulls marginal workers into the labor market, and these workers are the most dependent on public transit (Ferguson, 1997; Pucher, 2002). Table 7.8 presents the standardized coefficients for the variables in both models. As the results in Model 2 show, the predicted value of auto availability is third in importance after age and education. In contrast, Model 1 shows that the role of transit use in predicting employment, while statistically significant, is minor. In other words, holding constant for other factors, auto availability has a much larger effect on employment than does public transit use.

Table 7.8 Estimation of Employment

Independent Variables	Model 1	Model 2
	Standardized Coefficient	Standardized Coefficient
Intercept	0***	0***
Age	1.728***	1.508***
Age (squared)	-2.009***	-1.579***
Single-headed household	-.064*	.106***
High School Degree or higher	.884***	.665***
% Hispanic population	.251***	.135*
% language	.295***	.320***
% manufacturing employment	.065**	.032
Employment density	.048*	.059**
Transit (predicted value)	.058*	
Auto (predicted value)		.339***
R2	.508	.551
Adjusted R2	.504	.548
*p<.05, **p<.01, ***p<.001		

But the effect of auto availability on employment rates varies substantially across county type. As Table 7.9 shows, auto availability has a much larger effect in agricultural and mixed places and has less effect in rural and urban areas.

Table 7.9 Employment and Auto Availability by County Type

County Type	Standardized Coefficient for Auto Availability
Urban	.132
Mixed	.418
Rural	.195
Agricultural	.577

8. The Merits of Existing Transportation Programs for Low-Wage Workers

"New Federalism" is a term that describes the changing relationship between the national and state governments.[34] Although no consensus exists about the exact beginnings of New Federalism, researchers agree that it is defined by devolution—the shifting of responsibility away from the federal government and toward lower levels of jurisdiction (Watson and Gold, 1997). Devolution can be intentional, with Congress explicitly delegating control for programs to state or local governments, or it can result more subtly, through the fiscal choices of higher levels of governments. If Congress decides not to fund essential services or infrastructure, for instance, the burden and authority to do so necessarily falls on lower levels of government (Watson and Gold, 1997). In either case, by jettisoning the encumbrance of centralized control, devolution is purported to result in increased efficiency in a number of areas, ranging from increased innovation to better interagency collaboration.

This section examines whether the welfare-to-work transportation services that have developed in state, county, and local governments have resulted in the collaborative relations and innovations promised by devolution's proponents. We examine the legislative debates surrounding the creation of TANF, JARC, and other welfare-related programs, and from these debates, we draw out the assumptions and intentions that legislators used in crafting the programs. From the scholarly literature on devolution, we develop a framework for measuring and evaluating the specific gains and barriers to interagency collaboration and innovation.

We then analyze agency planning documents and grant applications, looking specifically for evidence of collaboration among agencies, paying particular attention to the roles of community-based organizations (CBOs) in the planning, financing, and implementation of welfare-to-work transportation programs. The research includes:

- Transportation plans prepared by the regional metropolitan planning organizations (MPOs) and regional transportation agencies (RTPAs) for of transportation services specifically designed to meet the transportation needs of welfare recipients;

- Plans developed by the local Private Industry Councils and Workforce Investment Boards under the Federal Welfare-To-Work Grant Program to meet the transportation needs of their clients;

[34]Scholars have used the term "New Federalism" to characterize several periods of federal decentralization since the New Deal, including the devolutionary phases led by Richard Nixon and Ronald Reagan. In this report, the New Federalism describes the deliberate Congressional policy aimed at shifting power from the federal government to states. While the ideological underpinnings of devolution have a long history, the 104th Congress was in a position to implement its beliefs regarding states rights and decentralization as a result of its "Contract with America." They did so most obviously with welfare legislation.

- Applications and reports prepared by transit agencies, county welfare departments (CWDs) and partner agencies seeking JARC funding; and

- The transportation elements of CalWORKS plans developed by CWDs in California.

Using these data, we are able to make some preliminary conclusions about transportation program development and policy implementation for welfare recipients and low-wage workers in California.

8.1 Twin Themes: Transportation and Devolution in Welfare Reform

Congress began shifting power over transportation away from federal and state governments in 1991, when it passed the Intermodal Surface Transportation Act, or ISTEA (Edner and McDowell, 2002; Schweitzer and Taylor, 2002; Lewis and Sprague, 1997). With ISTEA, the federal government empowered and funded regional planning agencies to carry out the transportation planning and programming for metropolitan areas.

The impulse toward devolution continued with the election of the 104th Congress in 1995. At this time, Congress debated several proposals aimed at converting federal welfare programs into flexible block grants. With the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) passed in August of 1996, the federal government formally devolved public assistance programs to the states: the Temporary Assistance to Needy Families (TANF), a flexible block grant program, replaced previous categorical matching grant programs like Aid to Families with Dependent Children (AFDC). Unlike AFDC, which outlined eligibility prerequisites and payment levels, TANF carries only a few federal rules, among them time limits and work requirements. Time limits and work requirements were intended to end welfare dependency; and devolution of responsibility was intended to increase the flexibility of state and local governments in reaching this end. This flexibility, proponents argued, would give local governments the opportunity to provide better and more efficient service to welfare recipients as they were transitioning into the workforce.

As legislators crafted their proposals for welfare reform, they stressed programs that would support recipients' work-seeking and work-maintaining activities. By the time Congress began to debate the legislation, the transportation problems of welfare recipients were considered common knowledge. In his testimony before the House of Representatives, Representative Robert Matsui (D-California) argued:

> Well, how are you going to get people to work? We all know that in order to create jobs, in order to create people in the work force, you have to provide job training, you have to provide education, you have to provide day care

> and even transportation, because most of these people on welfare do not have cars. So you have to provide them bus tokens (Matsui, 1995:C9321).

Senator Thomas Daschle (D-South Dakota) echoed these comments during the Senate's discussion of the PRWORA in July 1996:

> Many welfare recipients cite personal reasons for not working, like the lack of transportation or no job skills. The money to tear down these barriers is something that has to be provided in a welfare reform plan--money for transportation, resources for job training, resources it takes to create their own plans to put people to work (Daschle, 1995:S9881).

Similar sentiments pervade the *Congressional Record's* transcripts of the debates on welfare reform. In proposal after proposal, legislators made their intent clear. Welfare reform was to end state dependency, and it would do so by knocking down the barriers to employment such as inadequate child care, poor job skills, and transportation.

Also during debates on PRWORA, legislators voiced their beliefs about the benefits of devolution. Senator Dan Coates (R-Indiana) argued that "the devolution of power to States is necessary but not complete. Such devolution encourages innovation." (Coates, 1995:S9373). At the same time the legislators targeted the transportation problems of welfare recipients their interest in devolution dictated that control of the programs they created would not lie with the federal government. Thus welfare reform provided funding through the TANF program, which allowed but did not mandate social service agencies to use welfare money for transportation. The decisive power was vested in the agency rather than the government.

Although devolution is often considered a conservative impulse, devolution for welfare (and other programs, like transportation) had its fans among Democrats as well. The late Senator Daniel Patrick Moynihan (D-New York), for example, exulted in devolution's promise to increase innovation, experimentation, and managerial efficiency in a piece titled "Devolution Revolution" in the *New York Times* in August 1995.

Even after PWRORA, devolution and transportation for welfare recipients lingered on the legislative agenda. During the debates on amendments for the reauthorization of surface transportation legislation in 1997, a bi-partisan coalition led by Senator Carol Mosley-Braun (D-Illinois) proposed a set of amendments to the Transportation Equity Act of the 21st Century (TEA-21) that would fund the Job Access and Reverse Commute (JARC) program. Mosley-Braun's arguments illustrate the beliefs about urban form, labor markets, and transportation barriers to employment that led to the JARC program. It is worth quoting her at length:

> Two-thirds of all new jobs are being created in the suburbs. Many suburban communities report severe labor shortages because they cannot find enough workers looking for entry-level jobs. Public transportation systems, however, are often not designed to move people from either inner cities or rural areas to job opportunities in the suburbs. This amendment will help communities implement new transit systems designed to transport people of all income levels from their homes in cities and rural areas to jobs in rapidly-growing suburban communities … Mr. President, 94 percent of welfare recipients do not have cars. Low-wage earners often do not have cars. They are dependent on public transportation to get to areas with jobs. If the public transit is inadequate, the jobs become inaccessible. People cannot move from welfare to work if the people on welfare can't get to the work (Mosely-Braun, 1998:S10021).

As the review of research in Chapter 2 shows, some of the assumptions and numbers that Mosely-Braun references are inaccurate. Nevertheless, the comments reveal a belief that public transportation programs are needed to address the reverse commute needs of welfare recipients. This amended legislation required that, unlike TANF funds, JARC funds flow through the U.S. Department of Transportation to transportation agencies, community-based transit providers, and partner agencies, through a competitive granting process administered by the Federal Transit Administration.

Comments made during a separate debate on TEA-21 reflected the continuing interest in devolution concurrent to transportation programs. Congressman Richard Kyle (R-Arizona) noted that:

> We have a policy now in the Congress called devolution. It's a fancy word for "let's give power back to the states and to the local government and to the people." The Federal government has become too powerful (Kyle, 1998:S1750).

As these (and other) remarks demonstrate, devolution as a policy had endured in Congressional debates from ISTEA in 1992 through welfare reform in 1995 to the last amendments of TEA-21 in 1998. Thus, the programs that developed from these pieces of legislation reflected legislators' beliefs about the managerial superiority of lower levels of government. Both JARC and TANF transportation monies were to go to programs developed by *local* welfare or transit agencies. Such devolution was intended to lessen transportation barriers to employment through 1) increased innovation at the local level, and 2) increased collaboration among social welfare and transit agencies who, in order to be competitive for JARC funds, had to forge new partnerships with local community-based organizations or welfare agencies (Federal Transit Administration, 2000).

But this shift in power to states and localities, even if deliberate, does not guarantee innovation, managerial competence, or collaboration (Behn, 1999; Blumenberg, 2002; Elazar, 1994; Ingram, 1990; Tunstall, 2001). Sub-national governments vary significantly in their capacities, sophistication and orientation. Significant differences have already been found between states that directly administer welfare assistance and those (like California) that let counties administer their programs (Watson and Gold, 1997). Those charged with implementing these programs work—as demonstrated in Figure 4.2—within a complex matrix of intergovernmental relations. These relationships need to be examined more fully in order to evaluate the consequences of placing responsibility for welfare recipients at sub-national levels.

8.2 Evaluation Framework

Unfortunately, little research has evaluated the effect that devolution, or power shifts, has had on program implementation, outcomes, or effectiveness. As Tunstall (2001: 2495) points out in her investigation of devolution in the UK, "Research [on devolution] has been handicapped by key conceptual programs over definition, measurement, and the identification of effects, and challenged by gaps between rhetoric and reality."

But models of intergovernmental relations describe—even if they do not measure—the optimal governmental functions in a devolved and collaborative system. Optimally, higher levels of governments, such as the state or federal levels, can increase the managerial efficiency of public services in three major ways. First, higher levels of government can help coordinate local/state/federal resources, often by setting the terms of revenue-sharing (Agranoff, 2001). The 50-percent local match required under the JARC program, for instance, exemplifies resource coordination, because it uses resource policy to encourage collaboration. A second efficiency claimed for higher levels of government is its ability to identify and eliminate duplicative services. This efficiency has been difficult to prove, especially in transportation, since the definition of service duplication has never been adequately established, and since both practitioners and travelers have argued in favor of mode and route choice. Finally, higher levels of government create efficiencies by setting uniform standards, such as those for highway design or—in the case of welfare reform—time limits and work requirements.

Within these models of intergovernmental relations, local governments have four important roles to play (Elazar, 1994). First, local actors can contribute to managerial efficiency by competing for and securing resources for their local constituencies, such as by applying for competitive grants like JARC. A second major role for local governments—and one which legislators repeatedly reference—is the adaptation of government services to local conditions (Elazar, 1994).[35] In this view, more flexible

[35] An immense literature exists on the extent to which governments mix programs and services in an attempt to attract desired constituents, and various theorists have tried to explain the phenomenon. For this analysis, it is enough that local implementation of welfare programs should reflect some sensitivity to local needs and existing resources.

funding allows local actors to tailor programs based on their superior knowledge of local conditions. A third, related, efficiency pertains to the ability of local actors to experiment with programs and services on a smaller scale. JARC programs, for example, can act as pilot projects that test programs under different conditions.

Information management at all levels of government further contributes to collaboration and managerial efficiency. Local governments are best able to provide individual citizens with a voice in program governance, and then use the information derived from this input to alter public programs accordingly (Agranoff, 2001). Federal and state governments can then respond to such innovation by collecting and disseminating information about successful alterations. The creation of "Best Practices" documents exemplifies this type of collaborative policy development among agencies and governments.

Evidence about the extent and the quality of these functions can be difficult to obtain or measure. But researchers have in recent years attempted to evaluate the consequences of devolution in intergovernmental networks (Agranoff and MacGuire, 1998; Howitt, 1984; Liebschutz, 1991; Scheberle, 1997). The following characteristics are considered indicators of collaboration and program innovation:

Increased institutional links and agency overlap. One type of collaboration occurs between local agencies as they enter into revenue-matching agreements. Other links include subcontracting, joint or shared staffing arrangements, and shared assets. In the best cases envisioned by legislators, we should see some diversity among collaborative partners. In other words, we should find increased links between traditional social services providers, transit agencies, *and* non-governmental organizations.

Program diversity. If local actors have adapted programs to meet local conditions, and those conditions vary by locality, there should be a diversity (within the parameters of the program) in the types of transportation programs across the state that have been developed for welfare recipients. Program diversity can also indicate program innovation (Bozeman and Kingsley, 1998).

Match between program and context. If local actors have used their knowledge of local conditions to adapt programs, then the programs should demonstrate context sensitivity. For example, we would expect that programs developed in rural areas to differ from those developed in urban areas.

Program adjustment through bargaining and negotiation. If federal, state, and local agencies are collaborating effectively, there will often be changes in the way programs are administered (Agranoff, 2001). This type of change is called "program adjustment." Depending on the type of program adjustment, such programmatic changes can show that actors at lower levels of government are providing feedback—and having an influence—on the program.

In our content analysis of the plans and programs developed in California, we too treat these characteristics as evidence of innovation and collaboration.

Thus far, we have presented a rather idealized portrait of devolution. Scholars have also noted, however, that many factors can derail collaboration and innovation at the local level, including parochialism, competition among agencies, aversion to risk, and the high transaction costs of cooperative effort (Bozeman and Kingsley, 1998; Brehm and Gates, 1997; Gray, 1989; Hindmoor, 1998; Meyers *et al.,* 2001; Weissert, 2001).

These barriers to collaboration can arise from within the agencies themselves, or from the political environment surrounding them (Ingram, 1990). Indicators of barriers to collaboration and program innovation include:

- *Program incompatibility.* One factor that hobbles intergovernmental collaboration and innovation is a basic incompatibility of programs. This problem arises when the goals, approaches, practices, or staff professional orientation do not overlap enough for effective information sharing or activity coordination. In the case of transportation and welfare programs, Blumenberg (2002) finds that the differences in service scales between social service agencies and transportation providers hamstrung efforts at collaborative planning. Specifically, staff in social service agencies plan for and interact with individual clients, whereas transit and transportation agencies have tended towards a systems-based orientation, designed to serve the public as a collective, rather than as individuals.

- *Governing body or board opposition.* This barrier is linked to the first; if the members of an agency's governing body oppose a program or collaboration, then they can adopt policies that undermine it—even if the program or collaboration is mandated by higher levels of government (Agranoff 2001). For example, regional transit agency board members might hinder transportation services targeted towards welfare recipients because they oppose welfare policies in general.

- *Conflicting demands for staff time.* Staff of one agency may be unable to collaborate with other agencies because they are busy with the agency's basic services (Agranoff, 2001). A collaborative planning mandate in this environment adds to staff workload, and can be ineffective if changes in staff structure (either adding staff or changing responsibilities) do not occur.

- *Complicated application procedures, collaboration mechanisms, or compliance measures.* If the costs of collaboration exceed the expected benefits to the agency, then collaboration is not likely to be a priority for agency supervisors and directors (Hindmoor, 1998). These transaction costs may be prohibitive, especially for agencies with limited staff time. If grants or programs requiring interagency collaboration require further complex applications and auditing procedures, then the process may favor agencies with professional staff available for grant-writing and administration, and exclude those who lack these capacities.

- *Limited enforcement of restrictions and oversight.* Shifting power to lower levels of government has been shown to complicate auditing and enforcement for the higher level (Agranoff, 2001; Bohte and Meier, 2000). Poor oversight and enforcement suggests that higher levels of government cannot perform several key functions of positive collaboration, including performance evaluation of innovative programs, disseminating information on successful innovation, or enforcing minimum standards.

Table 8.1 Indicators of Collaboration and Innovation

Outcome	Indicators
Increased links	Revenue sharing agreements
	Joint planning documents
	Subcontracting
	Joint staff arrangements
Program diversity	Range of programs
Program match	Match between program type and service area
Program innovation	New programs (in addition to bus pass and mileage reimbursement)
	Percentage of funds going to new programs
Program adjustment	Changes in program rules
	Changes in target populations
Program incompatibility	Conflicting mission statements
	Conflicting planning goals
	Staff changes
Board opposition	No indicators in plans
Staff time conflicts	New staff positions
	Redefined staff positions
Administrative complexity	Information requirements of applications
	Informational requirements of reporting/auditing
	Funding duration/re-application periods
	Staff time spent on discretionary, collaborative activities
Enforcement	In-house performance evaluation
	Compliance with external reviews
	Reporting requirements

Table 8.1 summarizes the various indicators of collaboration and innovation that we find in the research on public administration and policy implementation. We look for each of these indicators in the content analysis and program histories we describe in the next section.

Virtually no data exist on these indicators and collecting an exhaustive set of information regarding these indicators was beyond the scope of our research. Moreover, even with the resources to do such an analysis, no baseline information about the programs exists in California. Nevertheless, there is a pressing need to establish an inventory of statewide programs and plans, and to understand the 1) plans and services currently offered, and 2) existing archival evidence on collaborative relationships and innovation.

8.3 Research Methodology

The institutional analysis was developed using a content analysis of archival documents (such as agency plans prepared to comply with state and federal programs) and funding applications. During a content analysis, the documents are examined systematically for information regarding programs and services for welfare recipients, and for any of the indicators listed in Table 8.1. We developed a typology of program types so that we could better categorize the data. This typology is presented in Table 8.2.

Table 8.2 Program Types and Definitions from Content Analysis

Program types	Program descriptions
Transit programs	Funds used to provide bus passes or tokens to recipients directly, or to reimburse recipients.
Van or shuttle programs	Vans or shuttles owned by the social service or transit agency, and operated specifically for welfare recipients or other low-income group to and from employment or program services.
Extended service	Program funds used to create new routes, extend routes, or extend hours (late service, early service, and weekends).
Information provision	Program funds used to hire a transportation coordinator, the development of individualized transportation plans or assessments, or online services designed to increase information exchange between transit agencies, social service caseworkers, and recipients. Some of these services may be targeted to welfare recipients, but database or online trip planning services are not.
Demand-responsive services	These are dial-a-ride and other demand-responsive services; these services are not typically targeted solely to welfare recipients.
Auto loan programs	Programs designed to help welfare recipients purchase private vehicles. Some provide direct loans to recipients; others guarantee loans made through private lenders.
Auto maintenance programs	Services and programs that help welfare recipients maintain their cars. Most of these are intended to help recipients in case of emergencies, and the receipt of funds depends on the case in question. The types of expenses covered include auto repair and maintenance, but the eligible expenses vary by program.
Auto operating subsidies	Programs that help recipients pay for vehicle operating costs, including gas vouchers, mileage reimbursement, insurance, smog

	check, and registration. Eligible expenses vary by county and by program.
Children's programs	Transportation services designed to help welfare recipients with child care or child-related transportation.

We followed up on the content analysis with telephone interviews of relevant agencies. In these brief, unstructured interactions, we gathered information about 1) the implementation of programs and services mentioned in the plans, and 2) additional transportation services the agencies support that may not have been included in their plans. The plans and materials we collected by program are summarized in Table 8.3.

Table 8.3 Research Materials and Activities

Program	**Materials obtained**	**Phone contact**
TANF	CalWORKs plans Regional Transportation Plans	County Social Service Departments
JARC	Applications Quarterly reports (limited) Regional Transportation Plans	Agencies awarded
Welfare-to-Work	Welfare-to-Work Federal Grant Addendums Welfare-to-Work Governor's 15% Grants 25% Federal Competitive Grants	Agencies awarded

Transportation programs funded from TANF monies are described in Section G of county CalWORKs plans. All are submitted to the California Department of Social Services. We obtained all 58 CalWORKs plans. From these plans, we developed a database of transportation services offered to welfare recipients by county, such as shuttle programs, mileage reimbursements, or transit subsidies. Following the content analysis, each county welfare agency was contacted. During these brief discussions, we verified that the counties had implemented the programs discussed in their plans, and asked about additional programs or services. We were able to contact 49 out of the 58 counties. Some counties did not respond to voice mail messages after repeated attempts. Counties where staff was unavailable for comment include: Colusa, Lake, Placer, San Benito, Siskiyou, Stanislaus, Tehama, Tuolumne, and Trinity.

For the JARC program, the goal of the content analysis was to examine the competitive applications for funding and the quarterly reports that were to be, according to program rules, filed subsequent to receiving funding. The FTA was approached for both the applications and the quarterly reports, and each agency receiving JARC funds was contacted by both telephone and letter, requesting copies of their applications and any quarterly reports submitted since the award.

Access to information proved to be a significant problem in evaluating JARC programs. Our repeated efforts to obtain copies of the JARC applications and data from the quarterly reports met with only modest success. We submitted a Freedom of Information Act (FOIA) Request to the Federal Transit Administration, but the applications were often so lengthy that the FTA staff was unwilling to provide copies. Since 2001, the applications have been submitted electronically, but we, again, were

unable to gain access to even these. In past evaluations, the U.S. General Accounting Office (GAO), in fact, has criticized the FTA and the U.S. DOT for the lack of performance evaluation done on the JARC program, and for the lax enforcement of the quarterly reporting requirements (U.S. General Accounting Office, 2002).

Despite these problems, we were able to obtain summaries of 32 applications, and we received a complete set of the applications submitted by Caltrans to the FTA by July 26, 2002. Thus the content analysis consists of examining 32 of the 39 competitively awarded applications in the State of California from FY 1999-2001. We also were able to obtain information on 7 out of 10 agencies who had received congressional earmarks. The applications described 83 specific programs around the state that received funding.

Because of the difficulty in obtaining archival information on the JARC program, members of our research team spoke at length with members of the FTA staff about their perspectives on the JARC program and the changes that have occurred in the funding process since its inception.

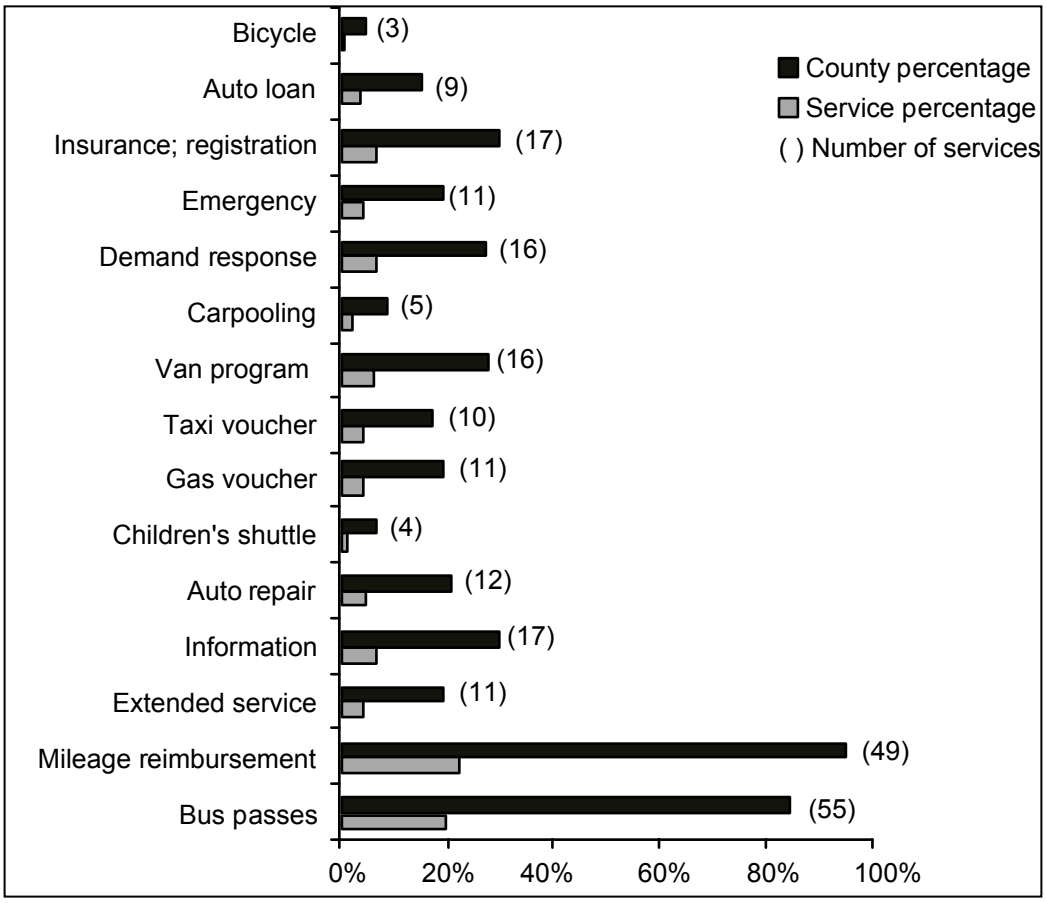
We used the results of the content analysis and agency contacts to organize an inventory of transportation services by program and by county. Our reliance on archival information limits the conclusions we can make regarding these programs' effectiveness, and we will be able to make only tentative conclusions about collaboration and innovation. Even with these limitations the analysis finds both strengths and weaknesses in federal programs established to meet the transportation needs of the poor.

8.4 Program Innovation

Among all three of the major programs—CalWORKs, JARC, and Welfare-to-Work, we found 253 services (not programs, as the same program can provide more than one service) offered in California's counties. Figure 8.1 shows the percentage of counties that offer these services, the total number of services that we found in our inquiry, and the prevalence of each type of service. (Prevalence is measured by the percentage of total services represented by each service type.)

Mileage reimbursements and bus token/pass programs were the most common program across the state; these programs are also among the most common provided by CWDs prior to welfare reform. This does not necessarily indicate a lack of innovation; the increased funding and emphasis placed on transportation subsequent to welfare reform encouraged some counties to offer mileage reimbursements and bus passes/tokens when they had not done so previously. Altogether, transit subsidies, bus passes and mileage reimbursements, accounted for the second largest percentage (18.4%) of new transit services mentioned by CWDs.

Figure 8.1 Transportation Services Available in California's Counties



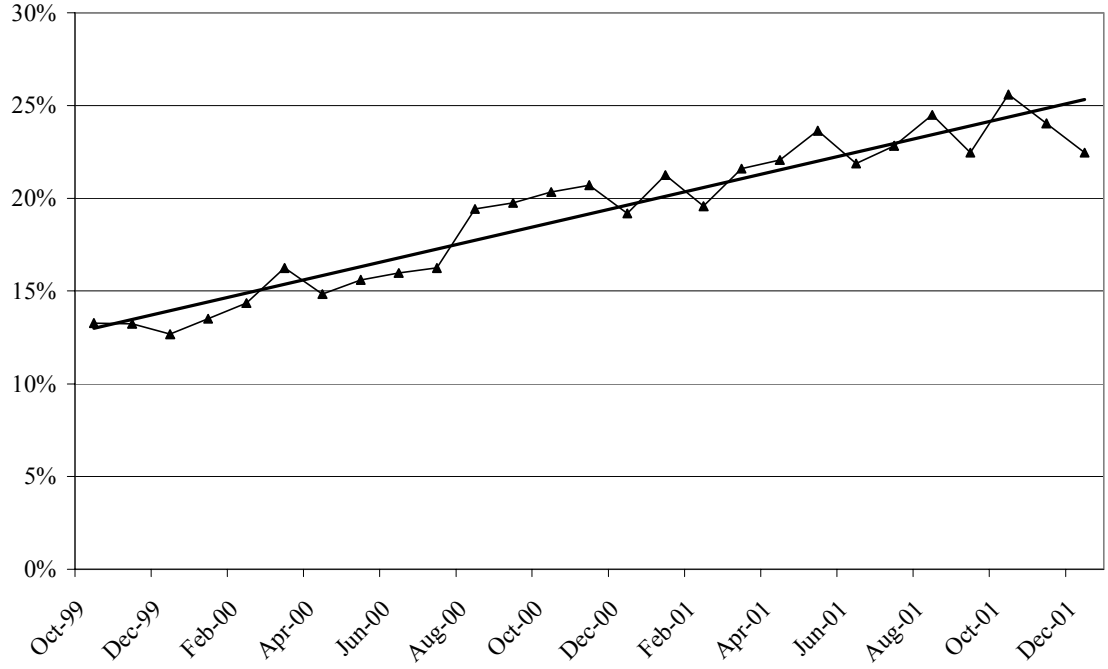
Many counties in California, however, lack sufficient public transit to get participants to and from program-related events, let alone to and from work. Those counties, unsurprisingly, relied on taxi-cabs, or on having CWD staff provide transportation—methods often used to compensate for a lack of public transit. Again, however, many of these arrangements existed prior to the development of programs designed to provide transportation services to those transitioning to work.

Thus, CWDs are using TANF to step up funding for many existing transportation services. This is not necessarily a problem, since bus passes and mileage reimbursements are most easily targeted to CalWORKs recipients, and can do much to make transportation more affordable. Innovation for its own sake may not be necessary, if affordability has been the primary transportation barrier for welfare recipients.

This strategy appears to be working by getting resources directly to welfare recipients. As Figure 8.2 shows, the percentage of enrolled CalWORKs participants who receive transportation subsidies in California has increased from 1999 to 2001. This increase may be the result of higher employment rates among recipients as well as the expansion of social service transportation services and programs. Either way, the

CalWORKS program has been able to increase the resources available to the target population.

Figure 8.2 Percent Enrolled Who Received Transportation Supportive Services



Source: California Department of Social Services (various years). CalWORKS Welfare-to-Work Monthly Activity Report. WTW 25 and WTW 25A.

Although the most commonly offered programs were those that had existed prior to welfare reform, our review found that many new programs had been developed. Auto loan/auto purchase programs accounted for 9 percent of services. These programs, usually only available for employed participants, are extremely diverse, and their rules vary significantly from place to place. Fresno CWD, for instance, has a contract with the Equal Employment Opportunity Commission to provide Individualized Development Accounts for employed participants. If participants save $1,000 over a certain time period, that amount is matched by $2,000, which can be used to purchase a car or a computer. In Sierra County, surplus county cars are made road safe and sold to CalWORKs participants at reduced rates. Only five cars, however, have been sold in two years. Marin, Humboldt, Shasta, and Sacramento CWDs, among other counties, operate more traditional auto loan programs, but these, too, are new.

Also new are the vanpool programs, bicycle purchase programs, and children's programs. Among these, the most common are vanpools and shuttles, which are run or sponsored by the CWDs. We counted among vanpools those programs where CWDs set aside vehicles or offered rides for welfare recipients to and from work-supporting activities, like childcare or education, along with more regularly scheduled vans to specific employers. The services offered through these programs vary significantly in scope and purpose from county-to-county. It is important to remember that these van and

shuttle services—even those that are regularly scheduled—do not cover the entire county; they are services targeted either to specific corridors, to specific employers, or to education/training centers.

One of the more interesting van programs was developed in Contra Costa County by the CWD. Funded by the Governor's 15% portion of WtW grants, the program trains and employs welfare recipients to run a shuttle service for children. Although we found only three services targeted toward providing transportation for children, these were among the more interesting programs. Butte County CWD developed a "Cabs for Kids" program, which helps the children of welfare recipients travel to day care or to after school programs at times when school buses are not available or when parents are at work.

Assistance with vehicle repairs, insurance, maintenance, and registration varied significantly from county to county. Many programs of this type were not new, although some CWDs and other agencies have developed new services in light of welfare reform. The majority of counties allows for emergency assistance only, and awards it case-by-case. In fact, these types of services tend to rely on the discretion of frontline caseworkers, who determine the need for services based on how much assistance the client had received previously, how recently the client had become employed, and whether the car was worth repairing (e.g., "We won't spend $4,000 to fix a '72 Pinto").

But some counties have developed a more formal approach. Using funds from the Governor's 15% fund, the Sacramento Department of Human Assistance developed a guaranteed automobile repair pilot project. The same agency operates the "Wheels to Work" program, in which the county pays six months of insurance if the employed participant pays the other six months.

These services contradict the belief that even if auto loan and purchasing programs help recipients afford cars, they often have such low incomes that they cannot afford them. Although vehicle affordability is an issue for those on assistance (and for those with low incomes but not receiving assistance), it is not the case that recipients have no help with unexpected expenses like repairs. But little information exists about the availability of this funding, or how reliable a source of help it is to recipients.

Each of the major programs—CalWORKs, JARC, and WtW grants—has fostered the development of myriad smaller programs. It is important to keep in mind that TANF funds are administered with wide flexibility, while JARC and WtW grants are awarded competitively based on criteria set by higher levels of government. In these cases, it is possible that the programs developed and ultimately funded may not exhibit the same level of innovation or context-sensitivity as those funded under the in TANF program.

Of the JARC programs funded in California from FY 1999 to FY 2001, a little over 21 percent provided transportation information to welfare recipients and other low-income riders, to help them more easily find transportation services. This service was usually done in one of two ways. Some counties implemented systems whereby

caseworkers provided transportation information to welfare recipients. For example, in FY 1999 and FY 2000, Outreach, a non-profit organization serving San Mateo County and southern Santa Clara County, offered individualized transit planning sessions and follow-up trip planning tests for participants. Other counties have established automated transportation information systems. In FY 1999, the Southern California Association of Governments used $425,502 in JARC funds to develop TranStar, an automated regional transit trip planning system.

The next most common programs are new transit services that may include new transit lines or extensions to existing lines (21%) or new shuttle services (7%). For example, in FY 1999, the Santa Rosa Department of Transit and Parking was awarded JARC funding to extend service within the City of Santa Rosa. Also in FY 1999, the United Parcel Service and the Orange County Social Service agency formed an employee shuttle service. In FY 1999 and then again in FY 2000, Yuba-Sutter Transit was granted JARC funds to establish an employee shuttle to move welfare recipients from the City of Marysville to industrial areas in South Placer County. Finally, in FY 2000, Alameda-Contra Costa Transit received JARC funds to establish new transit lines within Oakland's Enhanced Enterprise Community (EEC), which includes West Oakland, East Oakland, and the Fruitvale/San Antonio neighborhood.

Just over 6 percent of the programs were identified as reverse commute projects. This number includes any programs that were funded under the Reverse Commute allocation of JARC. Specific transportation services funded included a bilingual transportation guide as well as a traditional fixed-route service extension.

Demand-responsive service—dial-a-ride and guaranteed ride home programs—comprised 14.3 percent of all programs. An additional 13 percent of the programs included expanding the hours of service on existing transit lines. In FY 1999, Tulare County expanded service hours for two bus lines. In that same year, the Mendocino Transit Authority extended weekday service hours on transit lines that ran from outlying areas to employment areas. However, in the case of hour and service extensions on fixed-route transit, which are available to all transit users, it may be difficult to determine the extent to which they specifically benefit low-income commuters.

In total, 59 percent of the JARC programs were newly instituted. In 18 percent of the cases, the applications (or application summaries) we received failed to identify clearly whether funds were going to a new or previously existing program. Several of the programs awarded in FY 2000 were continuations of programs funded in FY 1999. Additionally, as the JARC program increasingly emphasizes awarding continuing programs, the percentage of existing programs will continue to rise.

This is not to suggest that JARC funds have not been used for new projects. One of the more prevalent innovations has been the creation of staff positions for transportation coordinators. The appearance of these positions demonstrates that the JARC program has prompted agencies to make staffing changes that 1) increase the possibility of information sharing and managerial collaboration between county welfare offices and transportation agencies, and 2) decreases the informational asymmetries

between agencies. Both of these changes raise the possibility for constructive collaboration between social service and transportation agencies.

Given these results, what can we conclude about program innovation and diversity? While the most common programs are bus pass/mileage reimbursements that CWDs have long funded, it is clear that new programs have arisen throughout the state as well. The programs are diverse, have been flexibly structured to rely on caseworkers (who have a lot of information about welfare recipients), and have come to address a cross-section of client needs, including children's transportation and auto access. Moreover, the amount of subsidy going to individual recipients has risen. Although we can not make definitive comments about how effective these programs are in providing transportation, the services offered have been flexible, diverse, and in some cases, innovative.

8.5 Interagency Relationships

Of all the welfare-to-work transportation programs, the JARC program's design most emphasizes interagency collaboration. It does this primarily through its steep 50-percent matching requirement.

Table 8.4 shows how applicants raised the 50-percent match. The funds typically are provided through the TANF and WtW programs; on occasion, however, other agencies—such as Workforce Investment Boards, local transportation providers, and non-profit organizations—have also provided matching funds.

As this table shows, TANF funds account for the majority of the matching funds. This indicates the presence of collaboration between transportation and county welfare agencies. However, it is difficult to determine whether this collaboration extends beyond simply providing funds. JARC applicants also made use of WtW funds from the U.S. Department of Labor. Therefore, the federal exception that allows JARC applicants to match their grants with funds from the WtW and TANF programs has been instrumental to allowing smaller agencies to leverage JARC funds.

Table 8.4 JARC Matching Fund Sources, FY 1999-2001

Matching Funding	Percentage
Temporary Assistance to Needy Families (County Welfare Department TANF funds)	39.0%
Temporary Assistance to Needy Families/Transportation Development Act Funds	8.5%
Transportation Development Act Funds[36]	3.4%
Local funds	8.5%
Community-Based Organization	1.7%
Temporary Assistance to Needy Families, U.S. Department of Labor, Community-Based Organizations	3.4%
Temporary Assistance to Needy Families, Workforce Investment Act	8.5%
Temporary Assistance to Needy Families, Private Company	1.7%
Temporary Assistance to Needy Families/U.S. Department of Labor	8.5%
State General Fund/U. S. Department of Labor/ Temporary Assistance to Needy Families	16.9%
Total	100%

Other funding sources have played a more limited role. In the applications that we have reviewed, for instance, we found only one example of private sector funding: the United Parcel Service (UPS). In FY 1999, UPS teamed with the Orange County Department of Social Services to fund an employee shuttle service.

In Calaveras County in FY 1999, the County Council of Governments (COG) relied on funds from a community-based organization to help with their funding match. In Alameda County, the East Bay Asian Local Development Corporation, a non-profit organization that received funding in FY 1999, provided the JARC local funding match in FY 1999. In terms of funding, the JARC program appears to facilitate new relationships with social service agencies and, to a lesser extent, Workforce Investment Boards. However, the program has been less successful in eliciting the financial participation of businesses and non-profit organizations.

Although community-based organizations and private firms were not common financial partners, they did participate more extensively in planning and program development. The JARC program further encouraged interagency collaboration by favoring applicants that could describe collaborative planning and program development in their proposals, and who could discuss how these partnerships would continue if the funds were granted.

[36]The California Transportation Development Act (TDA) provides two major sources of funding for public transportation—the Local Transportation Fund (LTF) and the State Transit Assistance (STA) fund. The LTF revenues are derived from one-quarter cent of the general statewide sales tax and are returned by the State to the counties in which they were collected. The STA revenues are derived from the sales tax on gasoline and diesel fuel. See California Department of Transportation, 2002.

Because of the problems we had gathering full applications, our knowledge about the quality and extent of the institutional links wrought by (or at least encouraged by) JARC is limited. Nonetheless, we found considerable evidence of interagency connections. The most basic level of interaction came in the form of planning partners who had developed grant proposals together. These were numerous. Less common were subcontracting or service partnerships, although some of those did develop. Table 8.5 summarizes the roles that agencies played in developing and implementing the JARC services. Transit providers were overwhelmingly the most common lead agency, and they were also common planning and service partners. There were 32 grant applications available for analysis; those 32 applications often contained more than one program per application. Nevertheless, 88 different transit providers were consulted in the planning stages of those applications. Only four CWDs came forward as the lead agencies in the grant process, and only 12 were listed as planning partners, even though TANF monies were commonly used for matches.

Table 8.5 Interagency Links

	Lead Agencies	Planning Partners	Service Partners
Transit Providers	27	88	17
CWDs	4	12	2
CBOs	1	20	3
Other social services agencies	0	17	1
Workforce development	0	10	0
PICs	0	4	0
Other government	0	5	1
Employers	0	7	0
Education	0	2	0

Only one CBO, Outreach, Inc., in Santa Clara County acted as the lead organization, though the applications listed 20 separate CBOs as planning partners, and three service partnerships (all of them in the Bay Area, and all of them providing outreach services). Given the high matching requirement, many CBOs may be unable to raise the funds necessary for the local match. Therefore, these organizations typically play a planning/advisory role. One way the state could foster greater interagency links may be through providing CBOs with resources to become financial partners in the local match. CBOs that have been included as planning partners in JARC programs include the Lao Khmu Assocation, the Charterhouse Center, the San Joaquin Indo-Chinese Association, and La Cooperativa Campesino de California. As shown in Appendix C, CBOs have been more prevalent as recipients of Governor's 15% and competitive WtW grants than they have of JARC funds.

Because we were not able to secure a full set of applications, we have undoubtedly undercounted inter-agency linkages. Still, the implication of the analysis is that the preponderance of JARC applications has come from transit providers, and that the transit providers are forging both service and planning relationships with other transit providers. Less apparent is their ability to involve CBOs as planning and service providers. Also less clear is the willingness of CWDs to apply for JARC funding; only

four acted as lead agencies. But in one case, the Orange County Transit Authority and the County of Orange Social Services agency acted as co-leads on the funding application, which may be a fruitful way to get CWDs and CBOs into the JARC program.

Regional Transportation Plans. This raises the question of whether CWDs and CBOs lack the experience to become more deeply involved in transportation provision, and whether transportation providers likewise lack the experience necessary to meet the needs of welfare recipients. A review of the state's regional transportation plans (RTPs) shows that the desire to build programs or institutional partnerships to provide transportation services for low-income populations varies across counties. Cross-county differences reflect variation in the transportation needs, barriers, and availability in communities across California counties. County RTPs must include the following three components (1) *goals*, the end result toward which efforts are directed; (2) *policies*, decisions that will guide future decisions and actions; and (3) *objectives*, the results that will be achieved by an identified point in time. However, these elements tend to be quite broad in scope. For example, one county plan states that one of its goals is to "make the most economical and efficient use of transportation revenues in providing transportation services and facilities, optimizing the movement of people, goods, and information." Many county plans include goals such as equality of services and frame their policies and objectives regarding welfare participants within this overall mission.

Some of the RTP goals are quite vague and, in their generality, encompass welfare recipients and other low-income population groups. For example, the Alpine County RTP states, "Limited size and dispersed nature of the County's population are a major reason that County involvement in mass transit or its expansion remains limited." In some plans, low-income, transit-dependent persons are mentioned a bit more directly. Butte County's RTP states, "To provide effective, convenient transit with emphasis placed on those sectors of the population that are most reliant on public transportation."

Some RTPs include goals that combine addressing the needs of low-income riders with that of other special needs groups such as the elderly and/or the disabled. For example, in Tahoe's RTP, Policy 10 states, "Improve the mobility of the elderly, handicapped, and other transit dependent groups." Additionally, many of the transit services specifically listed within the RTPs relate to paratransit, services for the elderly, and transit that complies with the Americans with Disabilities Act (ADA).

In some cases, welfare recipients are not lumped together with transit dependents. The Shasta Regional Transportation Planning Agency included as one of its short-range objectives the need to "identify the needs of CalWORKs recipients." The Sacramento Area Council of Governments was more specific; their RTP states:

> A new challenge for the region is the need for public transportation to jobs for people who were formerly welfare participants. Research shows that the locations of workers and likely jobs are not always close and don't

always work well with existing transit routes and schedules.

The RTP from the San Francisco/Bay Area was the most detailed in its approach to providing transportation services for welfare-to-work participants. The RTP included a collaborative and regional approach to transportation, most likely a product of the Metropolitan Transportation Commission's (MTC) multi-county RTPA status. The MTC plan includes:

- A low-income flexible transportation program that was started with $5 million in federal funds, intended to accelerate the implementation of local welfare-to-work projects identified in County plans; and

- A transportation for livable communities program, which provides planning and capital grants to small-scale transportation investments that have the potential to revitalize communities. These include streetscape improvements and transit-, pedestrian-, and bicycle-oriented developments.

Unlike the MTC's plan, most regional transportation plans do not mention programs for welfare recipients or low-wage workers. But this does not mean that these agencies have ignored the issue. Regional transportation agencies are the lead agencies in developing JARC applications, even though the plans of these same agencies make little mention of welfare recipients. The development of regional transportation plans occurs in tandem with mandated public participation processes, which include representatives from CWDs. As vague as their policies may be, there is little reason to believe that the mission and activities of these agencies conflict with those of CWDs or providing services to welfare recipients and low-wage workers. The problem may simply be one of scale. For regional transportation agencies, unlike CWDs or even transit agencies, welfare recipients represent a small portion of their service population. Thus the comparatively low emphasis on this group in general planning documents may not indicate these agencies' willingness to engage in service provision, but instead may be a sign only of their relative size.

In sum, we found that CBOs and CWDs are not receiving much in the way of JARC funding, and they are not as numerous as transit providers among service or planning partners to transit agencies seeking to develop JARC programs. But the planning and information partners included in JARC program development have been promising; transit agencies have included CBOs representing communities of color and community action organizations. Further, a large portion of JARC recipients have been rural transit providers attempting to provide extended services or flexible shuttle programs. CBOs are not evenly distributed throughout the state, and some of these recipients may not have had a large group of CBOs to involve as partners.

That said, the limited roles that CBOs have played in distributing JARC funds may still be a cause for concern. While the JARC and WtW programs are designed to provide transportation primarily for work trips, CBOs have been shown to be important

providers of work-supporting services like childcare, health, and training (Schweitzer and Valenzuela, under review). Having these groups participating in more than an advisory capacity may therefore prove extremely beneficial. This does not mean that CBOs necessarily have to take on transit operations, although many churches operate vans and food shuttles. They can also provide outreach services. But, if the content analysis is any reflection, this has only been done in a few, limited cases.

8.6 Program Negotiation and Transaction Costs

The evolution of the JARC program provides insight into how agencies have influenced the program over time, and how transaction costs can create barriers to implementation and collaboration. Most programs were funded during the first year of the JARC program in FY 1999. Agencies seeking multi-year funding had to resubmit applications the following year. This led to frustration for many recipients, as noted below:

> Since the initial award, which was overmatched with $300,000 of TDA funds, the City was informed by the Federal Transit Administration that the grant was awarded for a single year only, and that the City of Santa Rosa must submit a competitive application for each subsequent year of the program. This is a change from the guidelines that alter the multi-year application process. It is not prudent transit planning to begin a new bus route for residents of an under-served section of the City on a year-to-year basis. This is not the way to provide reliable bus service that passengers can count on to get home to work, job training, school, or appointments. It is our estimate that this new bus route would need additional operating assistance for five years, until ridership increases to equal the 30% fare-box recovery ratio for other established City Bus routes.[37]

In one respect, the transaction costs associated with reapplying year after year were a barrier for agencies, and a disincentive to applying for JARC funds. Partly in response to this problem, Congress began to earmark some funds in FY 2000, to ensure that programs, once started, would have some continuity from year to year.

For example, one Caltrans FY 2001 earmark funded a transportation program for farmworkers in Fresno, Tulare, Kings, and Kern counties. This program was originally awarded competitive monies totaling $1.5 million in FY 2000. The FTA was only able to provide $1 million in that fiscal year, and the remaining amount was made available to Caltrans in FY 2001. This serves as an example of how one specific program stayed active within the maze of JARC funding.

[37]City of Santa Rosa JARC Application, FY 2000.

But the growth in earmarked funds is not limited to recipients of competitive awards. Table 8.6 shows that the amount of earmarked funds has grown significantly in the four years of the program's existence.

Table 8.6 Congressional Earmarks

FY	Guaranteed JARC Funding (U.S.)	Congressional Earmark (U.S.)	Percent
1999	$50 million	$0	0%
2000	$75 million	$50 million	67%
2001	$100 million	$75 million	75%
2002	$125 million	$109 million	88%
Source: Caltrans, Division of Mass Transportation, Office of Job Access			

Three agencies in California received earmarked funding in FY 2000, and then seven did in the year after. We received information regarding all three applicants in FY 2000, and four of the applicants in FY 2001, as outlined below. Table 8.7 shows who received earmarks.

Table 8.7 Earmarked Funding Recipients

County	County Type	Specific Agency
FY 2000		
San Bernardino	Urban	Omnitrans
San Diego	Urban	Metropolitan Transit Development Board
Los Angeles	Urban	Metropolitan Transportation Authority
FY 2001		
Monterey	Agricultural	Monterey-SalinasTransit
San Francisco	Urban	
Santa Clara	Urban	Outreach/Santa Clara Valley Transit
Alameda and Contra Costa	Urban	
Sacramento	Urban	
Fresno, Tulare, Kings, Kern	Agricultural	Caltrans
Los Angeles	Urban	Metropolitan Planning Association

New and extended service accounted for the majority of programs financed by Congressional earmark during FY 2000-FY 2001. Omnitrans in San Bernardino specified that a current route would be revised to provide access to commercial and recreational destinations along the north side of Interstate 10 and to better serve the University of Redlands. Omnitrans also sought to reroute Route 67 to serve the entire Baseline corridor and provide connections to the Montclair Transcenter, which in turn offers connections to Los Angeles County and Metrolink.

These are arguably worthy projects. Still, the earmarking of funds represents a re-federalization of power, because Congress is exerting direct control over the JARC funding process. The U.S. GAO evaluations of the JARC program have criticized earmarking for subverting competitive and local conditions in favor of a more political process that is likely to be biased in favor of urban areas with many voters. At first glance, these fears seem justified. The earmarks do seem to be cutting CBOs and CWDs

out of the picture entirely, and big urban areas seem to be edging out the smaller agencies that were so prevalent when the majority of funds were dispersed competitively. With only three exceptions, the 16 JARC earmarks from FY 2000 through FY 2002 went to "urban" counties.

But this can be deceiving. The Metropolitan Transportation Authority (MTA) in Los Angeles received the largest percentage of earmarked funding over both years (see Appendix C). The JARC award financed the same project in both years, known as the Supplemental Transit Services Program, and this program does not necessarily close the door on CBOs and CWDs. Rather than directly provide the services themselves, the MTA hoped to solicit applicants from transit providers and non-profit organizations, who had specific transportation objectives for different geographic areas.[38]

Despite this, questions remain about who wins and who loses with earmarking. The Federal government (the FTA or Congress) have always established the criteria for competitive awards, but the impulse to apply came, literally, from the bottom up. And the earmarking of funds, although technically a re-consolidation of federal power, can also be seen as the government's responsiveness to the concerns of states and localities. It was feedback from local agencies, after all, that influenced the nature and distribution of the earmarks. Along the same lines, earmarking does attempt to lower the transactions costs associated with receiving funds. But the potential for pork-barrel and political earmarks remains a problem, and contradicts the original intent of the program, which was to promote bottom-up planning, the participation of CBOs and CWDs, and creative program applications.

Again, the FTA responded to feedback it received from the U.S. GAO and stakeholder agencies. The FTA has outlined changes in application and selection procedures for the last two years of the JARC program before reauthorization. The FTA will: [39]

- Consider multi-year funding in appropriate cases: "Because recipients of JARC funds have expressed the need for multi-year funding through the early stages of implementation, FTA will no longer limit awards to single year";

- Give priority to funding continuation of previously selected projects;

- Encourage new applicants to apply for funding for two years;

- Expect applications identified through Congressional directive or earmark must participate in the application process along with all other applicants. "FTA will evaluate and rank all projects submitted in response to this new solution";

[38]The program was intended to begin in the Fall of 2002.
[39]All information and quotes in this section have been taken from *Federal Register*, Vol. 67, Number 1, January 2, 2002, Page 135.

- Ensure that FY 2002 funds will go to continuing projects. "It is expected that FY 2002 funds will be used primarily, if not entirely for continuation projects, it is expected that new projects will not be funded until FY 2003 funds become available";

- Stress the "New Freedom Initiative Principles."[40] In keeping with President Bush's efforts to remove the remaining barriers affecting persons with disabilities JARC plans and applications must "address the mobility needs of persons with disabilities, among others, in reaching employment sites and support activities. Plans previously developed must be revised to include this information."[41]

8.7 Conclusions

Federal transportation programs for the poor have provided transportation services to low-income commuters that might not otherwise be available. The programs have also helped—even if by federal mandate—agencies work together to address the transportation barriers facing low-income adults.

But public funds have an opportunity cost. Therefore, while promising signs, these accomplishments must be accompanied by evidence that the federal funding programs have helped to develop successful transportation programs and services that improve the employment prospects of the poor. Evidence from this study suggests that federal programs could be strengthened in at least three ways. First, the programs could be enhanced by the increased commitment of local transit agencies to providing and funding transportation services targeted to low-income riders. This commitment could supplement the federal program and insure that effective JARC programs, once implemented, have the necessary resources and political support to continue.

Second, program evaluation—at both the federal and local levels—is necessary to measure the effectiveness of the JARC program as well as its costs. Evaluations of these programs can lead to identifying "best practices," a set of programs and services that have *proven* to effectively address the transportation needs of low-income workers and welfare recipients. Finally, greater program flexibility would allow local agencies to use federal funds more creatively, enabling agencies to experiment with auto-related programs as well as to more actively involve non-traditional organizations in both planning and service provision.

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[40] "New Freedom Initiative" funding would support additional transportation services to assist persons with disabilities reach jobs and is being proposed by the U.S. Department of Transportation for FY 2003, pending availability of funds from Congress. Additionally, JARC projects that address the needs of persons with disabilities will also be eligible for this funding.

[41] *Federal Register*, Vol. 67, Number 67, Pages 16790-19799. [Available at: http://www.fta.dot.gov/library/legal/federalregister/2002/fr4802a.html].

9. Meeting the Transportation Needs of California's Poor

There is no one-size-fits-all policy that will address the transportation needs of the poor in California. California is a diverse state; and low-income residents live in a wide variety of settings. Some are concentrated in inner-city neighborhoods located within large metropolitan areas; others live in medium-sized cities; and still others live dispersed in rural and agricultural areas.

Low-income adults also vary with respect to their transportation resources. Some low-income adults have unlimited access to automobiles, bringing into reach almost any destination within a reasonable trip time. Others live in households with cars but may have to compete for the use of vehicles. And other low-income adults have access to older and, more likely, unreliable vehicles that may not dependably serve their travel needs. Finally, many low-income adults are transit-dependent, relying almost exclusively on buses. If they live relatively close to employment opportunities and services and if transit service is good, buses—fixed-route transit—may be the ideal mode of travel. However, if the transit-dependent poor lives more distant from jobs and services, cars and, perhaps, demand-responsive service may be necessary.

Therefore, as the following sections show policies to meet the transportation needs of welfare recipients in California should be:

- tailored to the unique characteristics of individual counties and, even more importantly, individual neighborhoods within counties;
- reflect the particular needs of low-income adults, including their access to automobiles and employment status;
- enable welfare participants to purchase, insure, maintain, and otherwise drive reliable vehicles;
- rest on the rigorous program evaluation of existing welfare-to-work transportation programs; and
- encourage interagency collaboration while allowing agencies and organizations the flexibility to use federal funds in ways that best meet the transportation needs of the poor.

9.1 Targeting Transportation Policies and Funds—Finessing the Urban-Rural Balance

In California, policymakers face the challenge of addressing the transportation needs of welfare recipients who live in a wide variety of settings. The vast majority of the poor, like the majority of the population, lives in urban areas, and 35 percent of welfare recipients live in Los Angeles alone. This presents an obvious policy option: the majority of funds could be focused on urban areas, and in particular the Los Angeles area. This strategy would both reduce the cost of providing service and reach the greatest number of people in need. A program of this sort would likely involve enhancing fixed-route transit in dense areas, where existing ridership tends to be high and operating costs are relatively low. For example, data from the 2000 National Transit Database (National Transit Database, 2000) shows that the operating cost of fixed-route bus service in Los Angeles is $.50 per passenger mile, or $1.80 per unlinked passenger trip. At these rates, many low-income residents could be served with limited funds.

Every strategy has tradeoffs, however, and this one is no exception. Reaching the greatest number of people in need is quite different from reaching the people who are in the *greatest* need, and the highest poverty rates and greatest transportation gaps are not in our major cities; they are found more often in rural and agricultural counties, where the poor are more dispersed and public transit is quite limited. In these areas, the cost of providing transit service can be quite high, particularly in places where densities are too low to support fixed-route public transit. Providing demand-responsive service in Fresno County, for example, costs $2.57 per passenger mile, or just under $20.00 per unlinked passenger trip. This is more than 5 times as much as the costs of fixed-route transit in Los Angeles (National Transit Database, 2000).

An appropriate statewide policy, then, balances the transportation needs of the vast majority with the needs of the most disadvantaged. Funds ought to be set aside to accomplish both of these objectives.

9.2 Geographically-Targeted Transportation Services

Research on the spatial location of employment relative to the poor suggests the following:

- Many low-wage jobs are located in central-city neighborhoods;
- Geographic access to employment varies not only by the sheer presence of jobs but also by the competition for available employment opportunities and access to automobiles; and, finally,
- The urban structure of California counties is tremendously diverse, and so

too are the neighborhoods in which welfare recipients live. This diversity, moreover, is not necessarily congruent with narrowly-drawn conceptualizations of the spatial mismatch hypothesis.

Therefore, to address the transportation needs of welfare recipients, policies and services should be targeted to particular neighborhoods based on their individual characteristics: the relative density of low-wage employment, the density of low-income residents and, of course, existing levels of transit service. The matrix presented in Figure 9.1 links neighborhood characteristics with the relative density of low-income workers. Conceptually, this matrix seeks to define simple spatial characteristics with transportation resources that are likely to be well matched. Note that the matrix includes strategies that are not strictly related to transportation, but that nevertheless address spatial relationships between jobs and housing. This report does not discuss these alternative policy strategies, but a complete evaluation of programs to aid low-income workers obviously should consider such options.

Table 9.1 Transportation Policy Matrix

		Density of Low-Income Population	
		Higher Density	Lower Density
Density of Employment Opportunities	Job Richer	Enhancements to fixed-route service	Employer-sponsored vanpools or shuttles Housing mobility
	Job Poorer	Private vehicles Demand-responsive service Rapid bus, freeway flyers Local economic development	Private vehicles

As Table 9.1 shows, to address the transportation needs of low-income residents at the neighborhood level, policies and services should be targeted to the following four types of neighborhoods:

(1) *Job-Rich, High Welfare-Density Neighborhoods.* Public transit is most efficient in geographic areas with relatively high concentrations of origins and destinations—in this case neighborhoods with concentrations of low-income riders and neighborhoods with concentrations of employment opportunities. In these places, policymakers should focus on enhancing existing public transportation services. Enhancements might include adding bus routes in areas with limited service, increasing capacity by adding additional vehicles and shortening headways, and adding off-peak service to better accommodate night and weekend work schedules as well as non-work travel.

(2) *Job-Poor, High Welfare Density.* In many job-poor neighborhoods, even if welfare recipients could easily walk to a bus stop and board a bus, they would not get to their destinations in a reasonable amount of time because of the distance between where they work and where they live. Suburban employment centers on the urban fringe provide potential entry-level employment opportunities for recipients, but they are

often located great distances from where concentrations of recipients live. For these recipients, it is important to establish services that ease the burden of long-distance commutes. Recipients in these job-poor neighborhoods would benefit from programs that increase their access to automobiles, and programs that provide non-fixed route or demand-responsive transportation services. They would also benefit from public policies that are not directly transportation-related, but which may improve employment access in other ways. Local economic development, for example, although admittedly a long-term strategy, can be used to increase economic opportunities in areas of concentrated poverty.

(3) Job-Rich, Low Welfare-Density Neighborhoods. In these neighborhoods, policymakers might examine the feasibility of enhancing housing mobility for welfare recipients. This approach would include programs to make it easier for recipients to move close to employment centers if low-cost housing is available, or—if none is available—to establish programs that encourage developers to provide new low-cost housing.

(4) *Job-Poor, Low Welfare Recipient Density.* In job-poor neighborhoods where there are few welfare recipients, it is likely that cars are the best and most efficient transportation option. In non-urbanized areas of Fresno County, or the outer suburbs of northern Los Angeles County, both jobs and welfare recipients are less concentrated, and this makes travel much more difficult for those without access to automobiles. The data show that spatial access to employment remains relatively high among welfare recipients living in these areas, but this is only because many have reliable access to personal vehicles. The transit dependent recipients in these areas, although they are few in number, have only limited access to employment opportunities within a reasonable commute distance. From a policy perspective, the principal challenge is how best to serve these few. While perhaps politically problematic, facilitating access to reliable automobiles may be the most cost-effective approach.

It is important to keep in mind that the zones identified in Table 9.1 do not exist in isolation. Areas typified by high densities of low-wage workers must be considered in light of nearby employment concentrations. The transportation strategies identified in a given quadrant of the matrix are, therefore, not meant to be isolated within that neighborhood, but are useful by virtue of the areas they allow to be accessed. For example, the quadrant identified as job poor and high density lists rapid bus service as a potential strategy. Such bus service is most successful if it links job-poor neighborhoods with job-rich neighborhoods.

Although the matrix emphasizes only two neighborhood characteristics, we recognize that the existence of jobs and workers are only two dimensions of a complex system. One dimension involves existing levels of transportation service. The inclusion of a neighborhood within a sector of the matrix does not imply that it is underserved by existing public transit. Rather, it points to the types of services that might be appropriate to that neighborhood, many of which may already be present. For example, public transit

service tends to be quite high in areas with high densities of low-income residents and low-wage jobs. In Los Angeles, for example, more transit service may be needed to effectively accommodate the demand (Grengs, 2002). In other areas, however, existing levels of public transit may be adequate given the demand.

The specific characteristics of the local labor market may also influence the type of transit services appropriate for the area. Service sector and retail jobs often require employees to work non-standard schedules. Therefore, off-peak service—evenings, evenings, nights, and weekends—may be needed to accommodate the travel needs of workers in these sectors. In the Central Valley, many low-wage workers are employed in agricultural industries where employment is often seasonal and where workplaces may change throughout the year. Demand-responsive service may be most appropriate here, as it can adjust to the changing location of jobs and changing routes of workers.

9.3 Job Search Travel

The analysis presented in this report focuses on the geographic location of welfare recipients and the poor relative to employment, services, and childcare. However, other studies suggest that the transportation needs of low-income adults are mediated not only by the neighborhood in which they live but also by their employment status. Evidence suggests that as welfare recipients move through the various components of the welfare-to-work program, their transportation needs change. Transportation surveys of welfare recipients in Los Angeles and Fresno Counties show that welfare recipients perceive the greatest transportation difficulties during their search for employment when they must travel to multiple and unfamiliar destinations (Blumenberg, 2002; County of Los Angeles, 2000). These problems are particularly acute for transit-dependent job seekers who must create daily trip plans, take new and unfamiliar bus routes, and navigate unknown neighborhoods between transit stops and job sites. Once employed, though, transit-dependent recipients report far fewer travel difficulties, since they are commuting to known destinations and can routinize their travel. It should be a priority, therefore, to aid welfare recipients during this tenuous, but extremely important, job-search phase in the welfare-to-work program. The phase tends to be short-term, and could perhaps be served by specialized transportation services—such as rental cars.

9.4 The Role for Automobiles

There is no single policy solution to the transportation needs of the poor. In some neighborhoods, public transit will accommodate the needs of residents; in other neighborhoods—particularly low-density rural or suburban areas—cars may be the most cost-effective solution. But cars are not silver bullets; they do not necessarily overcome the transportation barriers faced by the poor. As mentioned in Section 2, cars can make travel easier but they can also create additional problems that must be addressed through specialized auto programs. Auto policies should:

(1) Increase automobile ownership. Increasing auto ownership among low-income adults might be the most politically controversial policy we suggest. It may also be among the most effective. Although most low-income adults commute by car, often they do not have unlimited access to reliable vehicles. Many low-income adults borrow automobiles, carpool, or compete with other adults for the use of the household car. For example, the ratio between persons in the household and household vehicles is 1.6 to 1 among working-age adults, 3 to 1 among low-income single parents, and over 4 to 1 among welfare recipients in Fresno County (Blumenberg, 2002). Further, many low-income adults own old vehicles that are often only a year or two away from substantial repairs. These automobiles often do not provide drivers with reliable transportation.

One of the most important strategies to increasing automobile ownership is lifting California's vehicle asset limitation (currently set at $4,650). California's asset limitation is too low and as a result essentially prohibits welfare recipients from owning reliable vehicles. Approximately half of all states have lifted their asset limitation, allowing welfare recipients to own at least one vehicle without becoming ineligible for benefits.

Changes to the state's vehicle asset limitation, by themselves, will not substantially raise auto ownership. Cars can be expensive and many welfare recipients cannot afford the initial purchase of a vehicle. Policies and programs must be established that enable welfare recipients to more easily purchase cars. Currently, many non-profit organizations and a few public agencies have developed auto purchase programs that are structured in a variety of ways.[42] However, most of these programs are quite small and clearly do not come close to meeting the demand for automobiles. At a federal level, policies to increase auto ownership would include dedicating additional federal funds (TANF, JARC, W-to-W) to auto ownership programs and allowing federal individual development accounts (IDA) to be used in the purchase of vehicles. Locally, more can be done to encourage private businesses to donate surplus fleet vehicles for recipient use, and to use the government's clout to broker low-interest loans.

Finally, government should work with the insurance industry to provide low-cost auto insurance, particularly in low-income neighborhoods. The state can also expand its role in providing low-cost auto insurance. For example, California's Lifeline Auto Insurance is a pilot program that makes low-cost car insurance available to low-income residents in Los Angeles and San Francisco counties. But in a survey of 273 low-income adults in Los Angeles and San Francisco, the Greenlining Institute (2001) finds that approximately 90 percent of respondents had never heard of the program. Among the 10 percent who were familiar with the program, none were able to describe it. In San Francisco and Los Angeles, welfare and employment agencies can remedy this situation by helping link low-income clients to the existing insurance program. And as the Consumer's Union and other organizations have argued, the program should also be expanded to include eligible drivers in other counties. Finally, the Greenlining (2001) evaluation finds that 68 percent of respondents would not purchase this insurance without

[42] See Hayden and Mauldin (2002) for a review of 26 of these programs.

some changes to the program. Therefore, more research is needed to examine the issue of take-up rates and to determine what, if any, changes to the program are necessary.

(2) Increase Access to Automobiles. Auto ownership is not the only strategy for increasing access to private vehicles. In some neighborhoods and for some trips, providing taxi vouchers may be the most cost effective strategy, particularly if the use of taxis allows welfare recipients to find employment and, ultimately, transition to other modes of transportation. The analysis presented in Section 7 suggests that carpooling may also be an option, particularly in low-income Hispanic neighborhoods. The role of carpooling in meeting the transportation needs of the poor is a topic that needs further examination.

9.5 Existing Transportation Programs for Low-Wage Workers

Federal funds and coordination among federal agencies has helped provide additional transportation services to low-income commuters that otherwise would likely not be provided. In particular, targeted funds available through the JARC program have been instrumental in the development and implementation of transportation services for the poor. There is no better evidence of this than the fact that once the funds are no longer available, many of the transportation programs are discontinued. The U.S. General Accounting Office reports that some of the 1999 grantees that were not selected for funding in 2000 or 2001 had to reduce their services or cease operation (U.S. General Accounting Office, 2002).

However, federal programs can be strengthened to better meet the needs of low-income adults in need of transportation services. The programs could be improved in the following ways.

Look beyond the spatial mismatch. Federal policies to increase welfare participants' access to employment are largely predicated on narrowly-drawn conceptualizations of the spatial mismatch hypothesis, which stress the spatial separation between the central city residential locations of welfare participants, rapidly expanding job opportunities in the suburbs, and the long commutes needed to connect them. For example, Section 3037 of the Job Access and Reverse Commute grant program reads, "Congress finds that (1) two-thirds of all new jobs are in the suburbs, whereas three-quarters of welfare recipients live in rural areas or central cities…" and closes with "many residents of cities and rural areas would like to take advantage of mass transit to gain access to suburban employment opportunities" (Federal Transit Act, 1998).

However, a growing body of research on the travel behavior of the poor, as well as on the spatial structure of urban areas, suggests that the residential and work location decisions of the poor are far more complex than narrow interpretations of the spatial mismatch hypothesis suggest. The results of this study show that due to job competition, low-income adults may have to commute slightly farther to find employment. But longer commutes do not necessarily translate into travel from the central city to the suburbs. In

addition to spatial isolation from employment, low-income adults face other transportation barriers, including the lack of access to reliable automobiles, limited public transit service within central city areas, and the challenge of combining work and household-supporting travel. Although policymakers should incorporate the spatial mismatch hypothesis when developing future transportation programs for low-income workers, they also should also look beyond it, and consider these other barriers as well.

Improve take-up rates. Agency staff must inform welfare recipients and other low-income adults about available transportation resources and help them successfully apply for appropriate programs. Limited evidence of demand-side TANF transportation subsidies and the low-income auto insurance pilot program suggests that the take-up rates for existing programs and subsidies is quite low.

Conduct effective program evaluation. While many transportation programs have been funded, their effectiveness remains a mystery. TEA-21 mandates that the U.S. Department of Transportation (DOT) evaluate the Job Access program and submit its findings to Congress by June 2000. The U.S. DOT has yet to complete this evaluation, and has yet to announce a date by which it will be released (U.S. General Accounting Office, 2002). The burden of evaluation does not rest, however, with the U.S. DOT alone. Grantees must also evaluate their programs to determine whether they are successfully addressing the transportation needs of their clients or riders. But local agencies rarely conduct the rigorous program evaluations necessary to make program adjustments.

Increase program flexibility while maintaining the focus on low-income riders. The JARC program may also be hampered by program requirements that limit its overall flexibility. JARC funds transportation, particularly public transit services, and requires a steep 50-percent match. These parameters limit the use of the funds for other types of programs that may be more likely to help low-income individuals travel to work-related destinations. For example, facilitating auto use may have a larger effect on the employment outcomes of low-income individuals than enhancing public transit services (Cervero et al., 2002; Ong, 1996; Ong, 2002). Also, the focus on the "transit network" rather than on individuals, constrains potential program options. The poor may benefit far more from transportation programs that help them during their job search than from programs that focus on the commute. Surveys show that welfare recipients engaged in job search report far greater transportation barriers than those who are employed and commuting (Blumenberg, 2002). Finally, while the 50-percent funding match has facilitated inter-agency collaboration, it may also deter smaller, non-traditional organizations from participating in the JARC program as equal partners with the larger transit and county welfare agencies.

TEA-21 is scheduled for reauthorization in 2003. As part of this reauthorization, Congress will also reconsider the Job Access and Reverse Commute Program, opening the door for eliminating or substantially reducing the size of the program. This process is a reminder that federal transportation funds for programs targeted to low-income commuters are not secure. This insecurity is compounded by county welfare agencies

that, after years of surplus budgets, now have fewer discretionary dollars from which to fund specialized services such as transportation (Neuberger, 2002). To overcome the uncertainties of the reauthorization process, and the ebbs and flows of JARC funding, local agencies must make a serious commitment to providing transportation services tailored to the needs of the poor. This commitment must extend beyond the Job Access and Reverse Commute program. Most transit riders in the U.S. are low-income, but transit agencies spend a disproportionate percentage of their resources enticing middle- and upper-income riders out of their cars and onto public transit (Garrett and Taylor, 1999). A commitment to better serving low-income riders would be a commitment to better serving those riders who are currently the bread and butter of public transit.

9.6 Future Analysis and Planning

This report and the accompanying maps provide an assessment of the spatial location of welfare recipients, low-income residents, employment opportunities, and services throughout California. It also summarizes the types of specialized transportation programs available for the poor. While this analysis offers state and county agencies a starting point for developing and geographically targeting transportation programs to meet the needs of low-income residents, another round of more detailed, local research is necessary to complete the planning process. Local agencies must now combine the maps presented in this report with more detailed analyses of existing transportation resources to determine gaps in services or need.

These planning efforts would be greatly aided by greater attention to data collection, strategies to increase the availability and accuracy of transportation data across all 58 California counties. These efforts might include:

- Developing a statewide database of existing fixed-route transportation lines and transit stops;
- Enhancing existing welfare administrative data to include the collection of information on the transportation resources of clients, such as the number of cars available in the household;[43] and
- Better evaluation of existing transportation programs aimed at low-income workers.

Further, in developing our analyses we must continually remind ourselves that transportation is a derived demand. Residents' proximity to employment or bus stops is not in and of itself important. What *is* important are the implications of spatial proximity for economic, social, or health outcomes—finding and keeping jobs, earning a decent living, applying for public benefits, or receiving quality healthcare or childcare.

[43] This recommendation may only be feasible if the state lifts the vehicle asset limitation.

Finally, one of the principal obstacles in developing effective transportation programs for the poor is political—the long-standing tension among transportation planners between promoting policies aimed at increasing transit ridership and promoting policies intended to ease travel in private vehicles. There are good reasons to support both of these efforts. Policies to increase transit ridership promise less congestion, cleaner air, and a more socially-interactive society. If appropriately targeted, enhanced public transit services—both fixed-route and demand-responsive—can help increase transit ridership while contributing to these broader societal goals.

At the same time, programs to facilitate driving allow low-income adults the means to get around in environments that have been largely structured around the automobile. The evidence is compelling that improving access to automobiles leads to improved economic outcomes among the poor. Transportation policies clearly need to address the negative effects of widespread auto use. But the potential contribution of auto-using welfare recipients to congestion and related problems is clearly very small, and efforts to deter the poor from acquiring cars have only a symbolic meaning in the battle against traffic. They have much graver effects on the efforts of the poor to get jobs. Welfare recipients are penalized for their poverty by policies that steer them toward modes of transportation, such as public transit, that may not be suited to their needs. Therefore, despite the political antagonism to cars and driving, effective transportation strategies for the poor must include both transit- and auto-oriented programs.

9.7 Conclusions

Table 9.2 summarizes the policy options presented in this report. These options are based on the assertion made at the outset—that California, a diverse state, requires a diverse set of transportation policies and programs to meet the transportation needs of the poor. Programs and policies ought to be targeted to where they will be most effective and, at the same time, federal policies ought to be strengthen to allow state and local agencies to provide the most effective and efficient mix of services.

Table 9.2 Summary of Policy Options

Policy Option #1	In targeting programs and funds across the state, balance the transportation needs of the vast majority with the needs of the most disadvantaged
Policy Option #2	Target programs and funds to particular neighborhoods based on their individual characteristics—density of employment opportunities, density of low-income households, and existing transportation resources • Enhance fixed-route transit in job-rich, low-income neighborhoods; • Provide demand-responsive service and access to automobiles in job-poor neighborhoods with high concentrations of low-income households; and • Increase access to cars in job-poor neighborhoods with low residential densities.
Policy Option #3	To target funds to neighborhoods within counties, couple the information provided in this report with detailed analyses of existing transportation services and programs currently provided within each county
Policy Option #4	Establish transportation programs to help low-income adults actively and widely search for employment
Policy Option #5	Increase access to automobiles • Lift California's vehicle asset limitation for welfare recipients; • Dedicate greater federal resources to low-income, auto purchase programs; and • Expand taxi voucher and carpooling programs.
Policy Option #6	Expand California's low-cost auto insurance program
Policy Option #7	Improve take-up rates for existing transportation programs and subsidies
Policy Option #8	With respect to the JARC program, increase federal program flexibility enabling agencies to provide a broad mix of transportation services while maintaining a focus on low-income riders • Increase JARC funding; • Discontinue Congressional earmarking; • Allow the use of JARC funds for automobile-related programs; and • Lower the 50-percent match rate.
Policy Option #9	Ensure that programs and services are evaluated in order to determine their effectiveness and efficiency
Policy Option #10	Improve the statewide data infrastructure to better target, implement, and evaluate transportation programs and services for the poor

Low-income adults face a host of barriers to employment of which transportation is only one. Poor job skills, low educational levels, physical or mental health problems, domestic violence, or inadequate employment support systems translate into difficulties in the labor market (Blumenberg, 2002; Danziger et al., 2000). Clearly improved transportation services cannot compensate for all of these problems. But the evidence is persuasive that they can help particularly if they are effectively targeted and subsequently evaluated.

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Appendix A. Methodology and Data Sources

A.1 List of Data Sources

American Business Information (ABI). Employment data by census block group and census tract for California.

Basewage. A subset of California personal income data from California unemployment insurance records, selected for individuals receiving welfare benefits. Data include quarterly earnings, and employer identifiers.

Business Establishment List 202 (BEL-202). An extract of state employer data listing firm characteristics for firms that hired welfare recipients. It includes information on total employment, firm address, and wage levels.

Current Population Survey (CPS). A monthly survey of 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. Information includes employment status, hours of work, and wages.

Medi-Cal Eligibility Determination System (MEDS). Administrative data from the California Department of Social Services listing addresses and some demographic information for all welfare participants in California.

U.S Census 1990 Summary Tape File 1 (STF1). One-hundred percent population count. Available variables included total population, population by age, population by race/ethnicity.

U.S Census 1990 Summary Tape File 3 (STF3). A weighted sample count. Available variables used included total population, population by age, population by race/ethnicity, number of persons in poverty, mode of transportation to work, average travel time to work.

U.S. Census 1990 Public Use Microdata Survey (PUMS). The PUMS data set includes data on time and duration of work trips for those who worked in the week prior to being surveyed.

U.S Census 1990 Transportation Planning Package (CTPP). Aggregated, zone-to-zone worker flow information from the 1990 census.

U.S. Census 2000 Demographic Profiles (DP). Variables used included total population, population by race/ethnicity, population by age.

U.S. Census 2000 Summary File 1 (SF1). Variables used included total population, population by race/ethnicity, population by age.

U.S. Census 2000 Summary File 3 (SF3). A weighted sample count. Available variables used included total population, population by age, population by race/ethnicity, number of persons in poverty, mode of transportation to work, average travel time to work.

California Training and Education Providers Database. Database of job training sites. This version of the California Education and Training Provider (CTEP) was produced by the California Employment Development Department (EDD), Labor Market Information Division (LMID), California Cooperative Occupational Information System (CCOIS). (Available at: http://www.soicc.ca.gov/ctep/)

Licensed Child Care Centers. Location and capacity data for all licensed child care centers provided by the California Department of Social Services.

Primary Care Clinics. Location and service provision details for all licensed primary care clinics provided by the California Office of Statewide Healthcare Planning and Development. (Available at: http://www.oshpd.cahwnet.gov/HQAD/HIRC/clinic/util/#Database)

A.2 Geographic Database

Geo-referenced Digital Map Sources

Geographic files for all 58 counties in California based on the U.S. Census Tiger 2000 files were obtained from ESRI Corporation. These included shape files for county boundaries, census block groups (1990 and 2000), census tracts (1990 and 2000), county census divisions (1990 and 2000), current congressional districts, metropolitan statistical areas, primary metropolitan statistical areas, traffic analysis zones, census transportation planning areas, urban/rural boundaries (1990 and 2000), urbanized areas (1990 and 2000), incorporated cities and unincorporated places, major transportation facilities, rail transit lines, highways, major and local streets, and key water features.

In addition, shape files were constructed identifying the boundaries for all state metropolitan planning organizations (MPOs), regional transportation planning agencies (RTPAs) and Councils of Governments (COGs). Finally, digital bus route maps for all fixed route transit systems in the state were obtained from the FTA Bus Route GIS Database, maintained by Bridgewater College.

Geocoding Welfare Recipients

From the MEDS data we drew an initial data sample consisting of case records for all recipients, age 18 and above, appearing on statewide welfare roll during the year 2000. The total number of records identified was 638,917. From this, we created a data set suitable for geocoding, consisting of unique residence addresses, linked to individual case records by a randomly-generated identifier to insure preservation of confidentiality. These records were separated into 58 separate county level data sets based on the MEDS

county designation for the person or persons residing at that address as shown in Table A.1, col. (1). Using this initial list of individual recipients, we constructed another list of unique addresses for geocoding. The use of unique addresses rather than case records reduced the geocoding effort since multiple recipients sometimes reside at the same address. We excluded unmatchable address records from each data set where (a) the mailing address was incomplete, was to general delivery, or to a post office or private mail box, or (b) was not within the county providing assistance to the recipient(s), or (c) other information indicated that the mailing address differed from the actual residential address.[44] The results are shown in Table A.1, cols. (5) and (6). Note that in some counties a substantial proportion of the addresses in the database were not suitable for geocoding and were excluded.

The resulting cleaned address data sets were geocoded in batches using the ArcGIS™ program. Two initial passes were made. The first pass was performed using county-level street address files obtained from the 2000 Tiger files. In the second pass, all unmatched records were then processed using a statewide street map file produced by the ESRI Corporation. To assure a high level of accuracy, the minimum match score was set relatively high (>= 80 out of 100). Tie scores were accepted only if the numerically highest record matches were all in the same block group. The cumulative results are reported in Table A.1, cols. (7) and (8). To correct for any spatial distortions in the initial geocoding, the results, consisting of spatial data points with latitude and longitude coordinates, were assigned to postal zones and the results compared to the distribution of zip code identifiers from the original address files to assure that the results were generally reliable.

A t-test was performed on each county file to identify postal zip code areas where there were statistically significant numbers ($p < .05$) of unmatched address records. Addresses from those zip code areas were then examined individually and re-geocoded manually to attempt to increase the match ratio. This step was repeated iteratively until no further spatial distortions that could be reasonably corrected were present.

The results of the address matching operation for each county were paired back with the original MEDS data through the random identifier to obtain the number of welfare recipients represented by the geocoded addresses in each block groups. Any block group containing five or fewer individuals was not mapped due to confidentiality requirements, however was included in analytical models. The totals for each of the non-suppressed block groups were normalized by the area of the block group and the results for each county were then divided into quartiles and assigned to the appropriate category: Very Low Density, Low Density, Medium Density or High Density. Maps were prepared for each county. Note that while the same categories are used for each county, the results are not comparable across counties owing to the fact that each county has its own unique range of population densities.

[44]Specifically, records were removed where mail for the recipient appeared to be sent in care of another individual or to a non-residential institutional addressee.

Table A.1 Geocoding Results

County	Total Case Records	% of Total Cases	Matched Case Records	Case Match Rate	Unique Addresses	Cleaned Address	Matched Addresses	Address Match Rate
Alameda	23,047	3.6%	20,962	91.0%	17,113	16,678	16,452	98.6%
Alpine	40	0.0%	33	82.5%	25	20	19	95.0%
Amador	338	0.1%	156	46.2%	280	145	132	91.0%
Butte	6,116	1.0%	5,475	89.5%	4,663	4,232	4,185	98.9%
Calaveras	721	0.1%	178	24.7%	565	152	143	94.1%
Colusa	305	0.0%	136	44.6%	240	118	109	92.4%
Contra Costa	10,590	1.7%	9,642	91.0%	8,287	7,977	7,836	98.2%
Del Norte	1,101	0.2%	845	76.7%	802	671	617	92.0%
El Dorado	1,458	0.2%	736	50.5%	1,156	625	587	93.9%
Fresno	28,348	4.4%	26,913	94.9%	20,396	19,653	19,411	98.8%
Glenn	718	0.1%	549	76.5%	546	472	420	89.0%
Humboldt	3,334	0.5%	2,045	61.3%	2,556	1,664	1,596	95.9%
Imperial	6,106	1.0%	4,921	80.6%	4,537	3,875	3,643	94.0%
Inyo	352	0.1%	131	37.2%	258	112	105	93.8%
Kern	21,867	3.4%	20,641	94.4%	16,926	16,217	15,939	98.3%
Kings	3,086	0.5%	2,770	89.8%	2,465	2,271	2,210	97.3%
Lake	2,349	0.4%	541	23.0%	1,783	472	445	94.3%
Lassen	865	0.1%	436	50.4%	638	348	325	93.4%
Los Angeles	226,508	35.5%	220,175	97.2%	168,908	166,841	164,366	98.5%
Madera	3,745	0.6%	3,130	83.6%	2,738	2,557	2,345	91.7%
Marin	908	0.1%	759	83.6%	754	663	627	94.6%
Mariposa	311	0.0%	131	42.1%	232	115	94	81.7%
Mendocino	2,247	0.4%	1,193	53.1%	1,723	1,047	946	90.4%
Merced	8,488	1.3%	7,474	88.1%	6,097	5,549	5,466	98.5%
Modoc	372	0.1%	146	39.2%	282	123	113	91.9%
Mono	76	0.0%	11	14.5%	65	14	10	71.4%
Monterey	5,252	0.8%	4,280	81.5%	4,195	3,502	3,431	98.0%
Napa	671	0.1%	528	78.7%	530	488	455	93.2%
Nevada	653	0.1%	443	67.8%	548	396	373	94.2%
Orange	23,616	3.7%	22,655	95.9%	17,017	16,630	16,303	98.0%
Placer	1,866	0.3%	1,446	77.5%	1,502	1,195	1,152	96.4%
Plumas	297	0.0%	66	22.2%	247	58	57	98.3%
Riverside	24,468	3.8%	22,978	93.9%	20,155	19,427	18,902	97.3%
Sacramento	43,917	6.9%	41,699	94.9%	31,039	29,908	29,717	99.4%
San Benito	672	0.1%	578	86.0%	515	469	461	98.3%
San Bernardino	44,931	7.0%	40,143	89.3%	34,795	32,544	31,298	96.2%
San Diego	33,505	5.2%	31,660	94.5%	25,125	24,776	24,438	98.6%
San Francisco	7,642	1.2%	7,232	94.6%	5,522	5,399	5,347	99.0%
San Joaquin	16,126	2.5%	15,152	94.0%	12,186	11,822	11,386	96.3%
San Luis Obispo	2,102	0.3%	1,743	82.9%	1,734	1,522	1,474	96.8%
San Mateo	1,628	0.3%	1,509	92.7%	1,357	1,295	1,275	98.5%
Santa Barbara	4,372	0.7%	3,976	90.9%	3,434	3,280	3,218	98.1%
Santa Clara	13,718	2.1%	12,952	94.4%	10,036	9,728	9,526	97.9%
Santa Cruz	2,371	0.4%	1,980	83.5%	1,796	1,660	1,604	96.6%
Shasta	5,256	0.8%	4,470	85.0%	3,881	3,539	3,399	96.0%
Sierra	50	0.0%	3	6.0%	42	2	2	100.0%
Siskiyou	1,442	0.2%	765	53.1%	1,069	600	575	95.8%
Solano	5,858	0.9%	5,575	95.2%	4,579	4,460	4,338	97.3%
Sonoma	3,038	0.5%	2,359	77.6%	2,474	2,064	1,960	95.0%
Stanislaus	10,299	1.6%	9,245	89.8%	8,663	7,916	7,803	98.6%
Sutter	1,674	0.3%	1,501	89.7%	1,247	1,180	1,151	97.5%
Tehama	1,706	0.3%	1,271	74.5%	1,305	1,042	979	94.0%
Trinity	348	0.1%	1	0.3%	275	4	1	25.0%
Tulare	14,160	2.2%	12,134	85.7%	10,274	9,012	8,803	97.7%
Tuolumne	1,097	0.2%	568	51.8%	874	505	458	90.7%
Ventura	6,514	1.0%	5,845	89.7%	5,133	4,936	4,736	95.9%
Yolo	3,253	0.5%	2,886	88.7%	2,367	2,190	2,111	96.4%
Yuba	3,019	0.5%	2,363	78.3%	2,127	1,777	1,673	94.1%
Total	638,917	100.0%	590,135	92.4%	480,250	455,937	446,547	97.9%

Mapping Low-Income Population Density

Using 2000 Census data by block group, we calculated the density of persons earning less than 150 percent of the federal poverty threshold. Similar to the welfare data, we mapped this information by quartile for each county. As above, results are not comparable across counties, and the value ranges of the quartiles used here differ from those generated by the welfare recipient analysis described above and therefore are not directly comparably with those results. Both the recipient and low-income population maps show the relative distribution of welfare recipients and low-income persons within each county.

Mapping Low-Wage Employment

Using ABI data, we calculated the density of low-wage jobs by block group for each county. Again, similar to the welfare data, we mapped this information by quartile for each county. Estimates of low-wage employment totals were constructed by Paul Ong and Douglas Houston (Lewis Center for Regional Policy Studies) using a combination of 2000 Current Population Survey data and 2000 ABI data. Income quartiles were constructed for the entire U.S. population using the CPS. These income breaks were then applied to Standard Industrial Classification (SIC) codes in the CPS to determine the fraction of jobs within each industry that fell into each income category. These fractions were then used as coefficients to multiply the number of jobs in each SIC category within each block group using ABI estimates of employment within the block groups. The jobs in each of the four income categories were summed across all SIC codes in each block group to construct the final estimates of jobs in the four income categories.

Geocoding Education, Training and Service Centers

We also identified and geocoded the location of all welfare offices, one-stop centers, community colleges, apprenticeship programs, secondary education facilities with occupational training programs, and adult education centers for the state. The list of addresses for these facilities was obtained from the state Economic Development Department. Where individual addresses could not be geocoded directly, they were mapped to the nearest identifiable cross streets.

Geocoding Licensed Child Care Centers

We obtained a list of all licensed child care centers from the California Department of Social Services and geocoded their locations by block group. The list consists of addresses identified as 810 (Family Day Care Home), 830 (Infant Center), 840 (School-Age Day Care Center), and 850 (Day Care Center). The locations of facilities were geocoded using the same procedure for welfare recipients, except that only the batch matching steps were performed. The data provided to us contained the total capacity (greater than 8) for each center. Information for any family child care center with a total capacity of 8 or fewer children is considered confidential by the department

and was not available. We calculated the total number of spaces or slots operated in each block group and, similar to the previous analyses, we then calculated the overall density of spaces for each block group and categorized the results by quartiles and mapped the results.

Transit Line Buffer Analysis

We were able to obtain a number of bus line geographic files for California counties from the Federal Transit Administration (FTA) Bus Line Database. The bus line shape files were constructed between 1994 and 1995 and have not been updated since that time. This information was supplemented with geographic files of bus routes from Fresno and Los Angeles counties from previous studies conducted through the UCLA Lewis Center for Regional Policy Studies. Due to the age of the data, they represent only an approximation of the current service areas of fixed route transit systems in the state. Using these files, we constructed ¼-mile buffer zones around each transit line. These were used to identify those previously geocoded welfare recipients who live within a ¼-mile of a fixed-route transit line and those living further away. The buffers were also used to identify the centroids of all block groups within the state located within a ¼-mile of a transit line. This information was used to approximate the number of low-income persons, low-wage jobs, and child care slots located within a ¼-mile from fixed-route public transit.

Geocoding Clinics and Health Care Centers

We identified and geocoded all clinics listed in the California Office of Statewide Health Planning and Development's (OSHPD) 2000 Primary Care Utilization Report of Primary Care Clinics. This list only includes clinics that were required to report to OSHPD and is not an exhaustive list of all clinics in California. Furthermore, we have no information regarding the suitability of any given clinic to our target population.

A.3 Statewide Data Summaries and County Comparisons

Employment characteristics for the CalWORKs participants were estimated by matching MEDS records for our sample with employment records (Basewage) obtained from California Department of Social Services (CDSS). The Basewage file contains information on all jobs held by persons receiving assistance in the State of California. The reported rate of employment for participants (64%) represents the match rate between the MEDS and Basewage data sets. It is important to note, however, that inclusion in the Basewage data set does not imply that the individual participant held a full-time job or that they held a job for the entire year.

The total statewide population of working-age adults differs slightly between the PUMS and STF-3 data sets. The population obtained from the 1990 PUMS (18,864,833) is about 33,000 less than STF-3 (18,898,683). PUMS data from the 2000 Census were

not available at the time of this analysis; further, cross tabulations for working-age adults earning at or below 150 percent of the poverty line were not available from STF-3.

All figures for working-age adults were derived from the PUMS data set, except for the county-level breakdowns, which were obtained from the 1990 U.S. Census STF-3 (Summary Tape File 3) data set.

Race/ethnicity is reported in the MEDS data set as Non-Hispanic White, African American, Hispanic, Asian/Pacific Islander, or Other. These categories are self-reported and mutually exclusive. The PUMS data set, however, separately reports the race and Hispanic origin of those surveyed. For purposes of comparison, composite variables comparable to the MEDs categories were produced by cross-tabulating the PUMS information by race and Hispanic origin, and combining the results into Non-Hispanic White, Hispanic (white or other race), African American and Asian/Pacific Islander (either Hispanic or non-Hispanic), and all others.

A.4 Job Accessibility Measures

To investigate the spatial relationship between low-wage jobs and workers we began by using the simple ratio of jobs to people within census block groups. However, this measure is inadequate due to policies that result in the separation of different land uses (e.g., zoning). To counter this problem, we introduced measures that include the characteristics of nearby block groups. A measure of employment availability (J_i) was constructed by summing all of the low-wage jobs (E_j) associated with census block groups whose centers were located within three miles of any given block group according to the following formula:

$$J_i = \sum_j \left(E_j \cdot f\left(d_{ij}\right) \right) \quad \text{Eq. 1}$$

Where i denotes a block group being measured and j is the set of all block groups whose centers lie three miles or less away from block group i. Similarly, a measure W_i, incorporating the 2000 census figures for the population below 100% of the federal poverty line (P_j), was constructed as follows:[45]

$$W_i = \sum_j \left(P_j \cdot f\left(d_{ij}\right) \right) \quad \text{Eq. 2}$$

In effect, these measures apply a filter to employment and population densities, smoothing insignificant variation from the raw job and population densities and giving greater weight to areas with clusters of jobs and employment. Equations 1 and 2 are useful for identifying areas in urban settings where the different policy and service strategies are appropriate.

[45]The 2000 ABI data were only available using 1990 block groups. Therefore, for the purposes of the mapping in Section 5, we used 1990 Census block group data.

In thinking about job accessibility, spatial proximity alone is not enough to determine whether a job seeker will be successful in finding employment. Another important consideration is the relative availability or scarcity of jobs. To examine this question, we extend Equations 1 and 2 into a distance-based form of the gravity model, which normalizes jobs available in any block group '*j*' by the low-income population in all block groups '*k*' that are three miles or less away. This access measure, A_i, is represented by Equation 3:

$$A_i = \sum_j \left[\frac{E_j \cdot f(d_{ij})}{\sum_k P_k \cdot f(d_{jk})} \right] \qquad \text{Eq. 3}$$

In all cases the distance function gives a weight of '1' to all census tracts less than or equal to one mile from the census tract being measured. After one mile, up to and including three miles, the weight decays in inverse proportion to the distance. This is described in Equation 4:

$$f(d) = \begin{cases} 1 & for\ d \le 1 \\ \frac{1}{d} & for\ 1 < d \le 3 \\ 0 & for\ d > 3 \end{cases} \qquad \text{Eq. 4}$$

The selection of a three-mile cutoff was based on a match of geocoded welfare-recipient addresses with the geocoded addresses of their employers. Statewide, the median one-way, straight-line travel distance from residence to work was approximately five miles. (In non-urbanized areas the figure was closer to six miles). Since this figure represents only employed recipients, it overestimates the travel distance of currently unemployed recipients (Cooke and Ross, 1999). For this reason, jobs closer to place of residence are likely to be more important for poor job seekers, and thus the three-mile figure was chosen. Note that in areas in which census tract centers are more than three miles apart (i.e., rural areas), Equation 3 reduces to the ratio of jobs within the census tract to the population within the census tract:

$$A_i = \frac{E_i}{P_i} \qquad \text{Eq. 5}$$

The friction factor, or decay function $f(d)$, differs from friction factors most frequently used by researchers who employ the gravity model in that it uses travel distance rather than travel time. Although travel time is a superior measure, the statewide scope of this project precluded its use in our models since travel times are only available for a few urban areas. The distance decay function that we used was selected based on observed commute distances. The distribution of all commute distances describe a cumulative distribution function similar to the cumulative inverse function above, indicating a good fit between observed data and decay function. Other studies have used a decay factor of $1/x^2$, however, we found that $1/x$ more closely matches our data.

A.5 Job Access and Welfare Usage Models

We use these measures to produce regression models of the proportion of welfare recipients among the working-age population. We wish to determine, the factors that lead low-educated adults to rely on welfare. The model that we propose is a least squares model of the following form:

$$R_i = \frac{W_i}{P_i}$$

$$\ln(\frac{R_i}{1-R_i}) = a_i + \beta_i x + \in_i$$

Where R is the welfare usage rate in tract i, W is the number of low-educated welfare recipients, and P is the total low-education working-age population. R is assumed to be a function of a vector of observed personal characteristics x, and β is the associated vector of coefficients. The other terms in the model are a constant a and the stochastic term $\in$ (which should be normally distributed and have an expected value of zero). We use a logistic transformation on the dependent variable because use of a proportion as an outcome measure introduces violations of the assumptions of OLS regression.[46]

The independent variables included in the model and the expected direction of their effects on welfare usage rates is summarized in Table A.2. When welfare usage is expected to increase with an increase in the independent variable, this is indicated with a '+.' When we expect usage decrease with an increase in the independent variable, this is indicated with a '-.'

[46]This model is subject to non-constant variance (heteroskedasticity). Although it produces an unbiased estimate of the dependent variable, it is not the most efficient model. There are several ways of handling this issue. One method is to use weighted least squares regression. However, finding an appropriate weight for the full model is a nontrivial task. Another is to use logistic regression employing maximum likelihood estimation of the model parameters. Because the results of this method are somewhat more difficult to interpret, and because the parameters produced by our tests of this method generally agree with our OLS results, we have chosen to report the more intuitive OLS model results.

Table A.2 Description of Independent Variables – Welfare Usage Models

Variable Name	Description	Expected Relationship
JOB ACCESS1	Job access measure controlling for competition	-
JOB ACCESS2	Job access measure showing spatial proximity to employment	?
SINGLE	Percentage of households headed by a single parent	+
LANG	Percentage of linguistically isolated households	+
MHHINC	Median household income	-
PCT_NOCAR	Percentage of households with no car available	+
BLACK	Percentage of African Americans	+
LATINO	Percentage of Latinos	-
ASIAN	Percentage of Asians	?
REC_IMM	Percentage of recent immigrants	-

This modeling technique was applied to the fifteen largest counties in California. Table A.3 shows the results of the model for all fifteen areas.

Table A.3 Welfare Usage Models by County

	Alameda	Contra Costa	Fresno	Kern
Intercept	**-4.50708*** **	**-3.76351*** **	**-2.81611*** **	**-3.57582*** **
Job competition	**-0.04816*** **	**-0.10538*** **	0.04026	**-0.33679*** **
Job proximity	0.00001837	-0.00001531	**0.00008949*** **	0.00002742
Density	**-0.00003840*** **	-0.00003223	-0.00005662	0.00003851
Median household income	**-0.00002092*** **	**-0.00002566*** **	**-0.00005185*** **	**-0.00002004** **
% no car	**-2.03432*** **	-1.89031	**-4.28142*** **	1.93052
Single parent	**5.97965*** **	**5.22889***	**5.18045*** **	**5.34669***
Children under 6	-0.79908	2.78106	2.16281	2.46120
% < H.S.	**3.03742*** **	-0.24828	1.36732	**1.72243***
Black	**1.85881*** **	**1.68299*** **	0.95681	-0.65323
Latino	0.49932	**3.88447*** **	**1.35230***	0.05783
Asian	**2.04513*** **	0.30503	**3.57663*** **	-0.49844
Linguistic isolation	-0.85052	**-4.06148***	**-3.99754*** **	**-3.84206** **
R2	.82	.89	.87	.76

	Los Angeles	Orange	Riverside	Sacramento
Intercept	**-2.95994*** **	**-4.07928*** **	**-3.97947*** **	**-2.80537*** **
Job competition	**-0.12494*** **	**-0.10373*** **	**-0.12097*** **	0.00184
Job proximity	**-0.00000872*** **	**0.00001824** **	**0.00006014** **	-0.00000576
Density	**-0.00000777** **	**-0.00003890*** **	**-0.00004906** *	0.00002808
Median household income	**-0.00003013*** **	**-0.00002819*** **	**-0.00002728*** **	**-0.00004069*** **
% no car	**-1.68580*** **	-1.48460	0.88329	**-2.00716*** **
Single parent	**3.62601*** **	**6.14433*** **	**4.91452*** **	**10.40801*** **
Children under 6	0.74828	-1.98598	1.69251	-0.58848
% < H.S.	**1.69972*** **	**4.42198*** **	**2.52849*** **	**2.39770** **
Black	**1.17950*** **	-0.51965	**2.25895*** **	-0.83030
Latino	0.07717	**-1.23933** **	0.81098	-1.29394
Asian	**0.46275*** **	**2.49509*** **	-0.21502	0.50095
Linguistic isolation	-0.45038	**-1.99323** *	**-5.62160*** **	0.47008
R2	.80	.76	.77	.72
	San Bernardino	**San Diego**	**San Francisco**	**San Joaquin**
Intercept	**-3.52866*** **	**-5.11687*** **	**-5.18749*** **	**-4.12426*** **
Job competition	-0.01114	**-0.11750*** **	-0.54297	**-0.07174** *
Job proximity	**-0.00005954** *	**0.00003312** **	0.00001317	0.00001257
Density	0.00006731	**-0.00002336** *	0.00000495	**0.00009198** *
Median household income	**-0.00003021*** **	**-0.00001864*** **	**-0.00001941*** **	**-0.00002432** **
% no car	1.19141	-0.04535	-0.31869	1.94506
Single parent	**4.95570*** **	**7.37428*** **	-0.99016	**5.42302** *
Children under 6	0.93315	0.33013	**8.63858*** **	-0.64045
% < H.S.	**2.62005** **	**4.31319*** **	-0.74429	1.61857
Black	0.29709	**1.65938*** **	**4.48466*** **	-1.60692
Latino	0.54571	-0.08056	2.75784***	0.79774
Asian	0.18524	**2.19230*** **	**3.42471*** **	**3.33811*** **
Linguistic isolation	**-4.99087** **	**-4.13017*** **	0.13788	**-3.51314** *
R2	.75	.75	.78	.78

	San Mateo	Santa Clara	Ventura
Intercept	**-6.69099*** **	**-4.96301*** **	**-5.10869*** **
job competition	-0.08962	**-0.04468***	-0.06160
job proximity	0.00003480	-0.00000906	0.00002793
density	1.354296E-7	**-0.00003259****	0.00002744
median household income	**-0.00000821***	**-0.00001633*** **	**-0.00001684*** **
% no car	2.38209	**-3.00610****	2.14840
single parent	**6.08278***	**8.29385*** **	**5.04743***
children under 6	2.24330	-2.45183	4.35147
% < H.S.	**3.02190***	**3.69873*** **	0.70912
black	0.73540	**11.98922*** **	-2.09288
latino	1.07282	0.26028	**2.42528****
asian	**1.58094****	**1.55333*** **	0.25936
linguistic isolation	**-4.93601***	-1.25182	**-5.49392*** **
R2	.68	.79	.80

A.6 Travel Mode, Auto Availability, and Employment Models

The analysis uses ordinary least squares regression to model (a) commute mode, (b) auto availability, (c) auto availability by county type, and (d) the relationship between auto availability and transit mode share on employment rates. Since the data are aggregated to the place level, places with populations of less than 50 have been omitted from the analysis. The variables and models are described in the body of the report.

A.7 Methodology and Data Sources for Institutional Analysis

The institutional analysis was developed using a content analysis of archival documents (e.g., agency plans prepared to comply with state and federal programs) and funding applications. During the content analysis, the documents were examined systematically for information regarding programs and services for welfare recipients. Information on the following variables was gathered (where available) from all the plans and documents:

- Plan/Document date;
- Transportation service provided;
- Program type;
- New program (Y/N);
- Program purpose;
- Program budget;

- Program service area; and
- Program planning partners.

Because we found myriad programs under different names and funded via a patchwork of funding programs, we developed a typology of program types to better categorize the data. This typology is presented in the body of the report, Table 8.2.

We followed up on the content analysis with telephone contact with relevant agencies. These were brief, unstructured interactions designed primarily to get information about 1) what programs and services mentioned in plans had been implemented, and 2) what transportation services the agencies support that may not have been mentioned in plans.

Temporary Assistance to Needy Families (TANF). Programs funded from the TANF program are described in Section G of county CalWORKs plans. All CalWORKs plans are submitted to the California Department of Social Services. We obtained all 58 CalWORKs plans, one from each county; these may be found at the agencies website (Available at: http: www.dss.cahwnet.gov/cdssweb/CountyPlan_283.htm). From these plans, we developed a database of transportation services offered to welfare recipients by county, such as shuttle programs, mileage reimbursements, or transit subsidies.

Following the content analysis, each county welfare agency was contacted. We targeted our contact towards transportation coordinators, for those counties that had them. For those that did not, we spoke with caseworkers who had been involved in the creation of their agency's CalWORKs plan. During these brief discussions, we verified that the counties had implemented the programs discussed in their plans, and asked about additional programs or services. Seventy-one additional transportation services were identified during follow-up telephone contacts. Many of these services were emergency or one-time services to help with vehicle-related expenses. We were able to contact 49 out of the 58 counties. Some counties did not respond to voice mail messages after repeated attempts. County staff was unavailable for comment in Colusa, Lake, Placer, San Benito, Siskiyou, Stanislaus, Tehama, Tuolumne, and Trinity Counties.

Job Access and Reverse Commute Program (JARC). For the JARC program, the goal of the content analysis was to examine the competitive applications for funding and quarterly reports that were to be, according to program rules, filed subsequent to receiving funding. The FTA was approached for both the applications and the quarterly reports, and each agency receiving JARC fund was contacted by telephone and by letter requesting copies of their applications and any quarterly reports submitted since the award.

As mentioned in the report, access to information proved to be a significant problem in evaluating JARC programs. Our repeated efforts to obtain copies of the JARC applications and data from the quarterly reports met with only modest success. We submitted a Freedom of Information (FOIA) request to the Federal Transit Administration (FTA), but the applications were often so lengthy that the FTA staff was

unwilling to send copies. Since 2001, the applications have been submitted electronically, and we were unable to have access to those applications.

Despite these problems, we were able to obtain summaries of 32 applications, and we received a complete set of the applications submitted by Caltrans to the FTA by July 26, 2002. Thus the content analysis consisted of examining 32 of the 39 total competitively awarded applications in the state of California from FY 1999-2001. We also were able to obtain information on 7 out of 10 agencies who had received congressional earmarks. The applications described 83 specific programs around the state that have received funding.

In addition to the content analysis, members of our research team spoke at length with members of the FTA staff about their perspectives on the JARC program and the changes that have occurred in the funding process since the program's inception.

U.S. Department of Health and Human Services Welfare-To-Work Grants. This information is found in the Welfare-to-Work Federal Grant Addendum each county prepares and submits to the California Department of Social Services (available at: http://www.dss.cahwnet.gov/cdssweb/CountyPlan_284.htm). Along with these plans, we looked at the programs covered under the Welfare-To-Work Governor's 15% Grants and 25 % Competitive Grants. These are available at http://www.edd.ca.gov/wtow15.htm.

Regional Transportation Plans. Regional agencies were contacted by telephone; their plans were examined to find any transportation services or projects directed at CalWORKs participants or low-income groups more generally.

We used the results of the content analysis and agency contacts to organize an inventory of transportation services by program and by county. The qualitative information provided in this phase of the analysis was then used in conjunction with the data on county types, welfare need, and socio-demographic information.

Appendix B. Detailed Descriptions of Federal Funding Programs

B.1 Temporary Assistance to Needy Families (TANF)

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 created the Temporary Assistance to Needy Families (TANF) program, administered by the U.S. Department of Health and Human Services, Administration for Children and Families. TANF provides assistance and work opportunities to needy families by granting federal block grants to states and giving them wide flexibility to develop and implement their own welfare programs. States are now responsible for developing their own welfare plans consistent with Federal regulations. Many states have included transportation policies, services, and benefits as one component of their welfare programs. Several states have lifted their vehicle asset limitation making it easier for welfare recipients to purchase reliable automobiles. Moreover, transportation services and benefits are consistently included as one of a number of employment services that county welfare agencies provide.

Welfare programs are funded through a combination of Federal and State funds. While both are very flexible, the two sources of funds entail somewhat different rules and restrictions. However, both Federal and State welfare funds can be used to provide transportation assistance to welfare recipients. The following are the major federal funding sources for welfare recipients and for transportation services for welfare recipients.

Federal block grant: TANF block grants to States total $16.5 billion annually through FY 2002.[47] When Federal funds are used, welfare recipients are subject to work and participation requirements, a five-year time limit on Federal "assistance," data reporting, and other prohibitions.

Performance bonuses: The federal government implemented two performance bonuses. The first rewards States for progress in achieving employment-related goals and the second awards States that achieve reductions in the numbers of non-marital births (California Department of Social Services, 2002).

State Maintenance of Effort (MOE) funds: Federal regulations require states to spend 80 percent of FY 1994's total state welfare spending to meet their basic MOE requirement. This percentage can drop to 75 percent if states meet their work participation requirements. MOE funds must be spent on TANF-eligible families.

State welfare funds: States can run separate programs to service needy population groups excluded from the Federal program.[48] These funds are not subject to the general TANF requirements.

[47]This amount is based on 1994 welfare caseloads and funding levels and is not adjusted for inflation or increases in caseloads.

[48]For example, in California two-parent family assistance operates as a separate state program.

Federal funds are only available to TANF-eligible participants. Eligible family members must include at least one minor child who lives with a caretaker and be "needy."[49] Pregnant women are also eligible for funds. Additionally, state welfare programs can widen the eligibility to include other family members such as non-custodial parents.

TANF-eligible families can receive transportation resources in two ways. Some benefits and services funded under TANF are referred to as "assistance."[50] More specifically, this refers to benefits directed at ongoing basic needs. Under this definition, transportation for participating in community service, education, or training qualifies as assistance for family members who *are not employed.* There is a 60-month Federal lifetime limit on receiving such TANF services and benefits.[51]

Transportation also can be identified as a supportive service that operates as non-assistance. This includes transportation services provided to employed families and provided as nonrecurring, short-term benefits. In this regard, transportation services usually support families participating in welfare-to-work activities and/or training (Department of Labor, 2001). Examples of this type of service include transportation offered during job search or to a recently employed family during a short period of unemployment (Greenberg, 2001). These services assist families in moving from welfare into the labor market.

States have flexibility in how they use these funds to assist participants in obtaining and retaining employment. In many states, county welfare departments provide bus passes and/or mileage reimbursement to enable participants to get to their assigned welfare-to-work activities. However, these funds can also be used for general projects that will improve the availability and accessibility of transportation services in communities. State, local, and Tribal TANF agencies, or private organizations providing services under contract with the TANF agency, may use TANF funds for a range of transportation services so long as the expenditure reasonably accomplishes a purpose of the TANF program, such as promoting job preparation and work (Department of Labor, 2001).

TANF funds can be used to provide necessary transportation services to TANF-eligible families. The following list includes some, but not all, examples:

- Provide transportation allowances to cover incidental expenses and participation-related expenses for unemployed families;

[49]Needy for TANF and MOE purposes means financial deprivation, i.e. lacking adequate income and resources according to the income and resource criteria established by the individual states to receive the particular benefit or service. U.S. DOL Directive, "Use of TANF, WtW, and Job Access Funds for Transportation." 2001.

[50]These benefits and services include, for example, food, clothing, shelter, utilities, household goods, personal care items, and general expenses.

[51]Certain exceptions can lengthen this time limit.

- Provide transit passes or tokens;

- Arrange with another agency to use its buses or vans or share in the costs of purchasing transportation services;

- Reimbursement in whole or part to TANF-eligible individuals to facilitate finding employment and job retention (e.g., mileage, gas, public transit fare, auto repairs/insurance, or a basic cash allowance for transportation needs);

- Contract with a private organization or service to refurbish previously owned cars and provide the cars to TANF recipients or providing financial assistance that enables participants to purchase a car;

- Subsidize costs of transporting needy children to child care; and

- Additionally, according to the U.S. Department of Health and Human Services, many states are making it easier for TANF participants to maintain ownership of a vehicle and keep their benefits by raising the vehicle asset limitation.

While the program was designed to allow states discretion in the implementation of TANF funds, there are certain federal restrictions on how monies and services can be used. They include:

- TANF funds can be used to subsidize transit projects available to the general public, so long as the project benefits TANF families and the TANF funds do not subsidize the transportation of non-TANF participants;

- TANF funds may not be used to match another Federal grant program unless specifically authorized by statute of that program; and

- TANF funds may not be used to contract or purchase facilities or buildings.

The CalWORKs Program. In response to federal welfare reform, California enacted the California Work Opportunities and Responsibilities to Kids (CalWORKs) program to implement the TANF program. Effective January 1, 1998, the implementation of CalWORKs marked a major shift in welfare policy by emphasizing moving welfare recipients into the workplace and imposing strict time limits on how long a person may receive cash assistance. In order to receive assistance, non-exempt participants in CalWORKs must participate in welfare-to-work activities that will enable them to become and remain employed. Funds are directly allocated to counties to provide assistance to participants as well as services outlined in each county's CalWORKs plans.

According to the California Department of Social Services (CDSS), participants in CalWORKs (unless exempt) are required to participate in welfare-to-work activities in order to receive aid.[52] The specific requirements are:

- Adults in one-parent families must spend at least 32 hours per week in welfare-to-work activities;

- After recipients find work, a variety of services are available for up to 12 months to assist them in retaining their employment and becoming fully self-sufficient;

- Implementing legislation and regulations have provided expanded flexibility to counties to tailor their welfare-to-work programs to meet the needs of their clients and the local labor market conditions; and

- Beginning October 1, 1999, two-parent families receive aid under a different state program.[53] Adults are required to participate in at least 35 hours each week of welfare-to-work activities. Both parents in the assistance unit may contribute toward the 35-hour requirement so long as at least one parent participates a minimum average of 20 hours per week.

B.2 Job Access and Reverse Commute (JARC) Program

On June 9, 1998 the Transportation Equity Act for the 21st Century, (TEA-21), was signed into law by President Clinton. The Job Access and Reverse Commute (JARC) program, created by Section 3037 of TEA-21, is operated by the Federal Transit Administration. The JARC program assists states and localities in developing new or expanded transportation services that connect welfare recipients and other low-income persons to jobs and other employment related services. Job Access projects are targeted at developing new or expanded transportation services such as shuttles, vanpools, new bus routes, connector services to mass transit, and guaranteed ride home programs. Reverse commute projects provide transportation services to suburban employment centers from urban, rural and other suburban locations.

JARC is intended to establish a coordinated regional approach to job access challenges. All projects funded under this program must be the result of a collaborative planning process that includes: states and metropolitan planning organizations (MPOs), transportation providers, agencies administering Temporary Assistance to Needy Families (TANF) and Welfare-to-Work (W-t-W) funds, human services agencies, public housing, childcare organizations, employers, states and affected communities, and other

[52]Under TANF, a state may exempt up to 20 percent of families from the five-year time limit for reasons of hardship. Single-parent families with children under six may also be excused from work requirements should childcare be unavailable. Single parents with children under one year of age can be exempted from work requirements.

[53]This program targets assistance units that consist of two, aided, non-disabled, natural or adoptive parents of the same aided minor child (living in the home), unless both parents are aided minors and neither is the head-of-household.

stakeholders. The program is expected to leverage other funds that are eligible to be expended for transportation and encourage a coordinated approach to transportation services.

JARC grants were authorized at $150 million annually for FY 1999-2003. Guaranteed funding began at $50 million, increasing $25 million each fiscal year. The program requirements state that as much as $10 million per year may be used for Reverse Commute projects. JARC funds must be used in the following ways:

- They must support new and/or expanded transportation services and cannot be used for construction or to subsidize existing operating costs;

- They must not supplant State transportation expenditures;

- The "preponderance" of the benefits derived form using JARC funds must accrue to current and former TANF recipients, non-custodial parents of children receiving TANF, and low-income individuals at risk of qualifying for TANF; and

- Transportation services provided from funds must promote the ability of TANF recipients to engage in work activities.

In urbanized areas with a population of 200,000 or more, Metropolitan Planning Organizations (MPOs) select the applicant(s). In small urbanized areas where the population is under 200,000 and in non-urbanized, rural areas, states or state transportation departments select the applicant(s). Tribal governments must go through the state process but, once selected, can choose to be sub-recipients of the state or apply directly to FTA.

Federal JARC funds require a 50-percent match from local funding sources. Funds from other Federal programs (with the exception of other Department of Transportation funds) can be used as part of this local match. Matching funds may come from programs such as HOPE IV grants administered by the U.S. Department of Housing and Urban Development, Social Service Block Grants and TANF funds administered by the U.S. Department of Health and Human Services, and Welfare-to-Work grant funds administered by the U.S. Department of Labor.

In FY 1999, the first year of the program, all projects were selected competitively based on the following criteria:

- Coordinated human services/transportation planning process involving state or local agencies that administer the Temporary Aid to Needy Families (TANF) and Welfare-to-Work (WtW) programs, the community to be served, and other area stakeholders;

- Unmet need for additional services and extent to which the service will meet that need;

- Project financing, including sustainability of funding and financial commitments from human service providers and existing transportation providers; and

- Other factors that may be taken into account including the use of innovative approaches, a schedule for project implementation, and the geographic distribution of services.

Applications were funded annually, meaning that multi-year projects would have to reapply for funding the following year. Additionally, continuing programs were not guaranteed funding.

Projects were also selected competitively in FY 2000. In the following year, however, projects funded competitively, shown in Appendix C, were selected from unfunded or under-funded projects submitted to the Federal Transit Administration (FTA) in FY 2000.[54]

Beginning in FY 2000, in addition to this competitive process, Congress began earmarking funds to specific projects. The increase in Congressional earmarks has brought criticism from the U.S. General Accounting Office.

Changes for FY 2002 and FY 2003

Responding to such criticism, the FTA has outlined changes in application and selection procedures for the last two years of the JARC program. Rather than solicit application proposals for each year individually, the applications have been solicited for both years at the same time (*Federal Register*, 2002). Changes to the application process are outlined below:

- Consider multi-year funding in appropriate cases;

- Give priority to funding continuation of previously selected projects;

- Applicants for new projects encouraged to apply for funding for two years;

- Applicants identified through Congressional directive or earmark must participate in the application process along with all other applicants; and

- FY 2002 funds will go to continuing projects.

The solicitation of grant proposals for the JARC program was announced in the Federal Register on April 8, 2002. Applications for continuing projects were due to their respective FTA regional office by June 7, 2002. Agencies submitting applications for

[54]Financial limitations in FY 2000 prevented the FTA from fully funding a number of qualified projects in that fiscal year.

new projects had the same deadline to "notify of their intent to apply," but had until July 8, 2002 to complete the application.

B.3 Welfare-to-Work Program

The Welfare-to-Work (WtW) Grant program was authorized under the Balanced Budget Act of 1997. Under this program, the U.S. Department of Labor (DOL) provides grants to States, tribes, and local communities to create job opportunities for the hardest-to-employ TANF recipients. The grants provided job placement services, transitional employment, and other support services welfare recipients need to make successful transitions into long-term unsubsidized employment. Transportation services, as one of a number of employment support services, were funded under this program.

Administration of the WtW program was the responsibility of the U.S. Department of Labor and local Workforce Investment Boards (formerly known as Private Industry Councils). Unlike TANF, WtW funds could only be used for work-related services, and could not be used for cash benefits (Smith and Brennan, 1998). WtW Grants were designed to reach the "hardest-to-employ TANF recipients. These included:

- Long-term welfare participants;
- Participants reaching TANF time limits;
- Non-custodial parents of TANF recipients; and
- Individuals with poor work histories and lack of education.

Services are provided through one-stop centers that allow for the coordination of basic service delivery across multiple agencies including Workforce Investment Boards, county welfare departments, transportation providers, and community-based organizations. The success of the program is measured through job placement rates, employment retention rates, and increases in earnings.

In FY 1998 and 1999, the DOL awarded two rounds of Welfare-to-Work (WtW) grants. Seventy-five percent of the funds were allocated as part of formula grants and the remainder was distributed as part of a competitive grant process.

Formula Grants (75% of total funds). Formula grants were allocated on the following basis:

- Each state's share of the poverty population within the United States; and
- Number of individuals on welfare.

In fiscal years 1998 and 1999, the Department of Labor granted California $367,644,783. Over this same period the state provided $183,613,769 in matching funds.

These grants were allocated to California's Employment Development Department. Eighty-five percent of these funds were allocated to the Workforce Investment Boards in each county based on the following formula:

- 55% based on poverty level;
- 30% based on the number of adults receiving TANF assistance for 30 months or longer; and
- 15% based on the number of persons who were unemployed.

While 85 percent of these funds were distributed to the counties, 15 percent were retained by the state for state-designated projects. In California, funds retained as state-designated projects were known as the "Governor's 15%." Similar to other formula grants, the Governor's 15% was awarded in FY 1998 and FY 1999. However, unlike the other 85% of the funds, there were no formula requirements ensuring that counties would get an equal distribution of these funds. These funds could be used to give special consideration and resources to certain types of programs, geographic locations, or organizations.

Competitive Grants (25% of funds). In consultation with local Workforce Investment Boards, local governments, community-based organizations, and other entities could apply to the Department of Labor for WtW competitive grants. No matching funds were required for these funds. "For the purposes of the competitive grants only, a public transit system could apply for a competitive grant in conjunction with the Local Board [WIB] or political subdivisions." Grants from this funding stream were awarded to programs in high-poverty urban and rural areas. Program selections were based on the relative need for the program, innovativeness in program design, proposed program outcomes, evidence of local collaboration and sustainability, and the demonstrated capabilities of the applicant organization.

There were three rounds of grant awarded: Round 1 in May 1998, Round 2 in November 1998, and Round 3 in September 1999. A total of $694 million was awarded nationally. A total of 25 agencies in California received awards amounting to $81.3 million and 11.7 percent of the funds.

Many of the eligibility requirements and restrictions were similar to those of the TANF program. However, because the WtW program targeted the hardest to employ recipients, there were a few differences. Welfare-to-work funds:

- could be used only for transportation services not otherwise available to the participants;
- could only be spent on transportation services for individuals participating in WtW activities;

- could be matched in the form of third-party in kind contributions;
- could not provide financial assistance for the lease or purchase of vehicles; and
- could not provide matching funds under the TANF program or other federal programs with the exception of the JARC program.[55]

[55]As provided in Section 3037 of TEA-21.

Appendix C. Detailed List of Existing Transportation Programs by Federal Funding Type

C.1 Transportation Programs Funded through CalWORKS

Table C.1 Transportation Services in County Welfare Department

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Alameda	1998	Bus passes, tickets	Subsidy	N	Transportation to and from program-related services	CalWORKs participants entering workforce be included in populations eligible for subsidized transit fares	Monthly bus pass valued at $49.00, or that amount in cash if own car. If one-way trip more than an hour by bus or BART, can get paid set amount per mile
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Several CBOs operate vanpools for commuters to and from areas with limited transportation accessibility	Transportation services can be extended for one year beyond time limits
		Transit information	Information	Y	Information		
Alpine	1997	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Vanpools to and from local labor markets (unable to complete because of lack of funding)	None
		Minor auto repair	Auto repair	N	Repair private auto for transpiration to and from program-related services	Changes to legislation to include mileage reimbursements up to sixty months	
		Transportation to job interview using CalWORKs vehicle	Transportation using CalWORKs vehicle/staff	Y	Obtaining employment		

Table C.1. Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Amador	1998	Mileage reimbursements	Subsidy	N	Transportation to and from program-related services	Researching additional methods, including diversion lump-sum program to assist with transportation expenses related to immediate employment, vanpool, shuttle services, increasing hours and routes of public transit	Pay for taxi on extremely limited basis
		Gas vouchers	Subsidy	N	Transportation to and from program-related services		
		Taxi vouchers	Subsidy	N	Transportation to and from program-related services		
		Bus passes	Subsidy	N	Transportation to and from program-related services		
		Volunteer Carpooling	Rideshare/Carpool	N	Transportation to and from program-related services		
Butte	2001	Bus passes	Subsidy	N	Transportation to and from program-related services	None.	PIC offers direct service on case-by-case basis in remote parts of county
		Mileage reimbursements	Subsidy	N	Transportation to and from program-related services		"Cabs for Kids": Cab to get kids to daycare when schools can not
		Provide information to existing transit services	Information	N	Information		Car repair on case-by-case basis

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Calaveras	1998	Bus passes	Subsidy	N	Transportation to and from program-related services, Including to and from childcare	Explore ideas such as car pooling, financing car repairs, facilitating use of school buses or donated vehicles	Fund one fixed transit service in county
		Mileage reimbursements	Subsidy	N	Transportation to and from program-related services, Including to and from childcare		
Colusa	1997	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services, Including to and from childcare	None	Not available
		Extended route service	Bus route	N	Transportation to and from Yuba College		
Contra Costa	1997	Reimbursement for transportation expenses	Subsidy	N	Transportation to and from program-related services, employment retention services	Consumer education	Demand response for CalWORKs participants. Up to 50 free rides for six months within 3 main zones
						"Universal Transit Pass"	
		Meet with local transit providers to develop methods to better meet transportation needs	Collaboration	N	Meet with local transit providers to develop methods to better meet transportation needs	Possible financial incentives for employers who provide transit passes	Auto loan program up to $3,000 to start in June 2002
							Assistance with insurance
Del Norte	1998	Transit vouchers, purchase orders	Subsidy	N	Transportation to and from program-related services if more than 2 miles round trip from home	None	Assistance with auto expenses on a case-by-case basis

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
El Dorado	2000	Bus passes	Subsidy	N	Transportation to and from program-related services.	None	Rural areas of counties taxi service with voucher
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services.		
		Vehicle repair, maintenance	Auto repair	N	Transportation to and from program-related services.		
		DSS aides transport clients	Transportation using CalWORKs vehicle/staff	Y	Transportation to and from program-related services.		
Fresno	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services.	Extend services if funds become available	Contract with EEOC to provide shuttle service from 6 pm to 6 am
		Bus passes	Subsidy	N	Transportation to and from program-related services.		Have purchased bicycles for participants.
		Gas, oil, transmission fluid Vouchers	Emergency auto maintenance	N	Transportation to and from program-related services.		EEOC contract: If participant saves $1,000 over certain time period, amount matched by $2000, which can be used to purchase a car or a computer.
		Assessment by job specialist	Information	N	Information		Contract with Fresno City College to provide driver education (not behind the wheel)
							Assistance with insurance, car registration on case-by-case basis, smog check

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Glenn	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Van operated for and by CalWORKS clients; free bus ride vouchers, developing vocational program to teach vehicle. repair	Purchased two vans that are operated by local transit provider for CalWORKs participants for rides to and from employment and to and from program-related activities.
Humboldt	1998	Public transportation passes	Subsidy	N	Transportation to and from program-related services	None	Assistance with insurance on case-by-case basis
							Dial-a-Ride pass with local taxi company
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services		Auto loan Program ($5000 limit) with State Incentive Money
Imperial	1998	Develop a transportation plan for recipients who obtain jobs	Information/trip planning	N	Transportation to and from employment	None	Transit passes
							Mileage reimbursements
							Taxi on very limited basis (emergency)
							Dial-a-Ride
							Assistance with insurance, car registration on limited, case by case basis
Inyo	1998	Mileage reimbursements	Subsidy	N	Transportation to and from program-related services.	None	Public dial-a-ride (Not Administered by Social Services Department)
		Gas vouchers	Subsidy	N	Transportation to and from program-related services.		

Table C.1. Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Kern	1998	Mileage reimbursements	Subsidy	N	Transportation to and from program-related services.	None	Taxi on very limited basis (emergency)
							Assistance with insurance, car registration on case-by-case basis
							Instituted "least cost" option: will pay for mileage reimbursement or transit pass, which ever is cheaper.
							Have purchased bicycles for participants.
		Transportation vouchers	Subsidy	N	Transportation to and from program-related services.		Faith-based CBO has an auto loan assistance program, but no direct County funding
Kings	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services.	None	None
		Pay for transportation utilizing existing transportation services	Subsidy	N	Transportation to and from program-related services.		
		Dial-a-Ride	Dial-a-Ride	N	Transportation to and from program-related services.		
Lake	1998	Assessment of individualized transportation needs	Trip planning	N	Information	Collaborate with county-wide community partners to examine transportation possibilities	None
		Reimbursement for transportation expenses	Subsidy	N	Transportation to and from program-related services.		

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Lassen	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services.	Implementation of Transit Development Plan; establishment of tele-communication centers in areas that receive limited transportation service	Bus passes
							Use county vehicles to drive participants to program related events, training (Very limited)
							Car registration/fees on a case-by-case basis
Los Angeles	1998	Bus passes	Subsidy	N	Transportation to and from program-related services, post-employment services	Collaborate with major public transportation operators	Shuttle Service Pilot Project (in conjunction with MTA)
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services, post-employment services	Explore programs to help participants purchase own vehicles	
		Reimbursement for parking fees, student identification	Subsidy	N	Transportation to and from program-related services, post-employment services		
		Money for car repairs, insurance, or registration on case by case basis	Auto repair/maintenance subsidy	N	Transportation to and from program-related services.		

C.1 Transportation Services in County Welfare Deparment CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Madera	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Expansion of public transportation, including fixed-route system	Extended service
		Bus passes	Subsidy	N	Transportation to and from program-related services		
		Emergency gas vouchers	Emergency subsidy	N	Transportation to and from program-related services		
Marin	1998	Bus tickets	Subsidy	N	Transportation to and from program-related services	None	Temporary program that offered grants for car purchases
		Mileage Reimbursement	Subsidy	N	Transportation to and from program-related services		About to start low-interest car loan program with local bank
Mariposa	1998	Bus passes	Subsidy	N	Transportation to and from program-related services	None	Occasional car repair, registration, driver license fees, smog check assistance
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services		
Mendocino	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Develop and expand public transportation and other alternative modes	None
		Bus tickets	Subsidy	N	Transportation to and from program-related services		
		Emergency gas vouchers	Subsidy	N	Transportation to and from program-related services		
Merced	1998	ALL OPTIONS WERE IN PLANNING STAGES				Off-peak transportation met with expanded dial-a-ride program, subsidies, vouchers, vanpools, carpools, ride share	Bus passes/tokens
							Mileage reimbursement

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Modoc	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Radius-type cost allowance for participants driving own vehicle	No services beyond what outlined in plan.-
		Advance gas vouchers	Subsidy	N	Transportation to and from program-related services		
		Public transportation passes, vouchers	Subsidy	N	Transportation to and from program-related services		
		Utilizing CalWORKs-owned vehicles	Transportation using CalWORKs vehicle/staff	N	Transportation to and from program-related services		
Mono	1998	Transportation reimbursements according to regulations	Subsidy	N	Transportation to and from program-related services	Subcontract for transportation services for CalWORKS participants	Dial-a-ride pass within Daly City
Monterey	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services; job search and job search workshop activities	Collaborate with local transit operators	Collaborate with local transit operators
		Bus tickets, (vouchers if necessary)	Subsidy	N	Transportation to and from program-related services		Case-by-case assistance with auto expenses

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Napa	1998	NO SERVICES SPECIFICALLY MENTIONED				Development of hour "job problem" crisis line can be set up to assist people who have issues such as transportation and child care and need short-term and immediate help in order to get to work the next day	Hired transportation coordinator
						Funding position for a transportation specialist	Hotline for participants in need of transportation or child care services for next day or short-term
						Exploring ideas including vanpool	Guaranteed ride home
							Vanpool
							Trip planning
							Bus passes/tokens
							Mileage reimbursements
Nevada	1998	Bus passes	Subsidy	N	Transportation to and from program-related services	Advocacy of participants to local employers and training providers	Extending bus route with local transit provider
							Extending hours of route with local transit providers
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services		Provide car repair assistance only on case-by-case basis and only for participants who are employed

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Orange	1997	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Identify how well existing routes are servicing CalWORKS participants	Van pools/shuttle
		Bus passes	Subsidy	N	Transportation to and from program-related services	Develop carpool and vanpool services for participants not serviced by bus routes	Coordinator
		Dial-a-ride access program	Dial-a-Ride	N	Transportation to and from program-related services		Taxi
Placer	1998	Bus Passes	Subsidy	N	Transportation to and from program-related services	Pursing efforts to perform a geographic information mapping system to inventory client populations, childcare providers, government and community resource centers, and transportation lines	Not Available
		Mileage and parking reimbursement	Subsidy	N	Transportation to and from program-related services		
Plumas	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	None	Car registration/fees on a case-by-case basis
		Bus passes	Subsidy	N	Transportation to and from program-related services		
Riverside	1997	Bus tickets, passes	Subsidy	N	Transportation to and from program-related services	Analyze effectiveness of available transportation; Consider enhancement of public transit routes; Promote use of existing services	Assistance with car registration, repairs, insurance, fees, etc. on case-by-case basis.
		Cash payments for use of private vehicles	Subsidy	N	Transportation to and from program-related services		Direct service provided by CalWORKs staff on case-by-case basis for interview or child care (not regular service to employment)

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Sacramen-to	1997	Gas reimbursements	Subsidy	N	Transportation to and from program-related services	Exploring transportation alternatives through coordinated non-duplicative local effort	In collaboration with paratransit and social service organizations, 3 fixed-route shuttle services in three areas of county.
		Bus passes	Subsidy	N	Transportation to and from program-related services	Providing low cost auto insurance	Auto loan program available for employed participants who pay certain percentage of income
		Job vehicle and neighborhood services	Transportation using CalWORKs vehicle/staff	Y	Transportation for job search		"Wheels to Work" program for employed participants. Participants pay 6 months of car insurance, county pays additional 6 months.
		Transportation coordinator	Coordinator	Y	Information		
San Benito	1997	Bus passes	Subsidy	N	Transportation to and from program-related services	Work with public transportation services to expand fixed-route service	None
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services		
San Bernardino	1997	Bus passes, tickets	Subsidy	N	Transportation to and from program-related services	Expand current services	None
		Gas scrip	Subsidy	N	Transportation to and from program-related services		
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services		
		TranStar	Information/Trip Planning	Y	Information/Trip Planning		

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
San Diego	1998	Bus tokens, tickets	Subsidy	N	Transportation to and from program-related services	Seek revenue and funding to improve access to employment hubs throughout county, including van pools	Extended service; collaboration
		Partial, complete monthly bus passes	Subsidy	N	Transportation to and from program-related services	New bus route to Otay Mesa	
		Mileage, cash reimbursement	Subsidy	N	Transportation to and from program-related services		
San Francisco	1998	Monthly MUNI transit passes	Subsidy	Y	Transportation to and from program-related services	Identifying regional issues of linking welfare recipients to regional job market	
		Bus tokens	Subsidy	N	Transportation to and from program-related services		
San Joaquin	1998	Bus passes	Subsidy	N	Transportation to and from program-related services	Developing a transportation plan to maximize use and availability of public transportation, including extending hours and service	None beyond that mentioned in plans
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Exploring options for bus passes or mileage reimbursement	
San Luis Obispo	1998	Collaborate with other institutions	Collaboration	Y	Research	Caltrans New Technology Program research grant to test new and emerging technologies in public transportation area leading to creation of model transportation program	Mileage reimbursements
							Bus passes

C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
San Mateo	1998	Bus passes	Subsidy	N	Transportation to and from program-related services	None	None
		Gas allowances	Subsidy	N	Transportation to and from program-related services		
		Funding for car repair (Very limited)	Auto Repair	N	Transportation to and from program-related services		
		Employer shuttles (case-by-case basis)	Shuttle	Y	Transportation to and from program-related services		
	1998	Loans for transportation	Loan	N	Transportation to and from program-related services		
Santa Barbara	2000	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Meeting with local transit providers to find new and innovative ways to utilize existing services and improve them, and implement recommendations of collaborative	None
		Emergency gas vouchers	Subsidy	N	Transportation to and from program-related services		
		Bus passes	Subsidy	N	Transportation to and from program-related services		
Santa Clara	1998	Bus passes	Subsidy	N	Transportation to and from program-related services	Offering bus passes and reimbursement after employment obtained	None
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Work with MTC to look at how transportation resources and services can be improved	

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Santa Cruz	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services.	None	None
		Cash advance payments for transportation costs	Subsidy	N	Transportation to and from program-related services.		
		Mobile services in remote parts of county	Transportation using CalWORKs vehicle/staff	Y	Transportation to and from program-related services.		
Shasta	2000	Bus tickets, buses	Subsidy	N	Transportation to and from program-related services.	None	Taxi Service on case-by-case basis
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services.		Assistance with car registration, repairs, insurance, fees, etc. on case-by-case basis.
		Transportation coordinator	Information	Y	Information		Automobile loan program
Sierra	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services.	Work to expand public transportation when funds become available	Working on an auto loan program in conjunction with Plumas County. ("Seems to be stalled")
		CalWORKs staff provide transportation using County van	Transportation using CalWORKs vehicle/staff	Y	Transportation to and from program-related services.	Possibility of using County-owned senior vans for CalWORKS client transportation	Assistance with car registration, repairs, insurance, fees, etc. on case-by-case basis.
						Purchasing van to transport clients to and from jobs out of area	Take surplus county cars, make road safe, and resell to CalWORKs participants at reduced rates. Five cars have been sold in 2 years

Table C.1. Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Siskiyou	1997	NO SPECIFIC MENTION OF PROGRAMS IN PLAN				Facilitate meeting with service providers to discuss needs and possible solutions	Not Available
Solano	1998	Bus passes	Subsidy	N	Transportation to and from program-related services.	Working with local transportation authority to develop additional solutions	Not Available
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services.	Exploring use of high mileage county cars as loaners/rentals for CalWORKS clients	
						Possibility of utilizing vanpools	
Sonoma	1998	Bus tickets/passes	Subsidy	N	Transportation to and from program-related services, and to accept employment, to and from child care	Coordinate with local transit operators, sharing plans from transit agencies, and attending meetings with transit providers	Collaboration
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services, and to accept employment, to and from child care		
		Emergency gas vouchers	Subsidy	N	Transportation to and from program-related services, and to accept employment, to and from child care		
Stanislaus	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services.	Collaborating with Transportation Policy Board to expand public transportation and hours of accessibility	Collaboration
		Bus tickets/passes	Subsidy	N	Transportation to and from program-related services.		
		Emergency gas vouchers	Subsidy	N	Transportation to and from program-related services.		

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Sutter	1998	Travel reimbursement	Subsidy	N	Transportation to and from program-related services	None	Have provided cabs on "unique" case basis for such things as night owl services
							Assistance with car registration, repairs, insurance, fees, etc. on case-by-case basis.
							Operate two vans for employment shuttle on part-time basis
Tehama	1998	Bus tickets/passes	Subsidy	N	Transportation to and from program-related services	Working with local transit agency to expand available services	Collaboration
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services	Participate in Social Services Advisory Committee to examine needs for increased transportation, find solutions	
		Payment for taxi fares	Subsidy	N	Transportation to and from program-related services		
Trinity	1998	Bus vouchers	Subsidy	N	Transportation to and from program-related services	Website with links to transportation providers	Not available
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services		
		Rideshare program	Rideshare	Y	Transportation to and from program-related services		

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Tulare	1998	Bus passes, tickets	Subsidy	N	Transportation to and from program-related services	Collaborating with local transit providers to maximize local transportation; evaluating alternatives for six months, subsidies, vouchers, vanpools, and contract paratransit operators	Not Available
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services		
Tuolumne	1998	Public transportation paid	Subsidy	N	Transportation to and from program-related services	None	Not Available
		Mileage reimbursement	Subsidy	N	Transportation to and from program-related services for those living more than one mile from public transportation zone		
Ventura	1998	Mileage reimbursement	Subsidy	N	Transportation to and from program-related services, transport children to and from childcare, and transportation to secure and retain employment	Develop rideshare to and from jobs, job interviews in Oxnard/Port Hueneme	None
						Job Opportunity Transportation: Identify small economy vehicles that can be donated or purchased at low cost. Sold to CalWORKS families for transportation to and from work	
		Public transportation passes/Monthly Smart Cards	Subsidy	N	Transportation to and from program-related services	Loans to purchase vehicles in Job Opportunity Transportation; loans guaranteed by Ventura County	

Table C.1 Transportation Services in County Welfare Department CalWORKs Plans (continued)

County	Year	Transportation Services Provided	Program Type	New Program (Y,N)	Purpose	Proposed Transportation Service	Additional Transportation Service
Yolo	1998	Mileage rimbursement	Subsidy	N	Transportation to and from program-related services	Continue exploring bringing services to where clients are and evaluate if statistical benefit to clients to do so	Assistance with car repair, insurance, registration, fees on case-by-case basis
		Bus tckets/psses	Subsidy	N	Transportation to and from program-related services		Van available for post–employment services
Yuba	1998	Mileage rimbursement	Subsidy	N	Transportation to and from program-related services	Meeting with local transit providers to expand service area, possibility of using taxi service, purchase of a vanpool, train CalWORKS participants to operate transit system on weekends, provide shuttle service	Staff may drive participants to program-related events, employment, infrequent
		Bus passes	Subsidy	N	Transportation to and from program-related services		Assistance with car repair, insurance, registration, fees on case-by-case basis

Source: Review of County Welfare Department CalWORKs Plans, available at http://www.dss.cahwnet.gov/cdssweb/CountyPlan_283.htm

C.2 Competitive JARC Funding

Table C.2 Competitive JARC Funding by County

County	County Type	Funding	Percentage	Organization
FY 1999		**$3,996,781**	**100%**	
Orange	Urban	31,250	0.8%	Transportation/Social Services Agency
Riverside	Mixed	70,000	1.8	Sunline Transit
Del Norte	Rural	73,250	1.8	Department. of Health and Human Services
Yuba	Agricultural	101,700	2.5	Yuba-Sutter Transit Authority
Mendocino	Rural	150,000	3.8	Mendocino Transit Authority
Calaveras	Rural	184,014	4.6	Calaveras County
Yolo	Mixed	191,843	4.8	Yolo County Transportation Commission; City of Davis
San Luis Obispo	Mixed	193,380	4.8	SLOCOG
Solano	Urban	200,000	5.0	Santa Rosa Dept. of Transit and Parking
Santa Cruz	Mixed	200,000	5.0	Human Resources Agency of Santa Cruz
Tulare	Rural	200,000	5.0	County of Tulare Health Services Agency
Kern	Agricultural	239,000	6.0	Kern Regional Transit
Alameda, Contra Costa	Urban	414,111	10.4	Contra Costa AC Transit; East Bay Local Development Corporation on Rides
Los Angeles	Urban	425,502	10.6	SCAG
Santa Clara	Urban	499,882	12.5	Outreach
Sacramento	Urban	822,849	20.6	Sacramento Regional Transit District
FY 2000		**$3,991,686**	**100%**	
Merced	Agricultural	76,525	1.9	Merced County Transit
Yuba	Agricultural	98,500	2.5	Yuba –Sutter Transit Authority
San Luis Obispo	Mixed	192,041	4.8	SLOCOG
San Diego	Urban	200,000	5.0	SANDAG
San Joaquin	Mixed	200,000	5.0	San Joaquin Council of Governments; San Joaquin Regional Transit District
San Francisco	Urban	262,037	6.6	San Francisco Airport Authority
Alameda	Urban	294,900	7.4	AC Transit
Monterey	Agricultural	367,683	9.2	Monterey-Salinas Transit
Santa Clara	Urban	500,000	12.5	Outreach
Sacramento	Urban	1,800,000	45.1	Caltrans; Sacramento Regional Transit District

Table C.2 Competitive JARC Funding by County (continued)

County	County Type	Funding	Percentage	Organization
FY 2001		**$2,122,311**	**100%**	
Napa	Mixed	62,500	2.9	Napa County Transportation planning
Mendocino	Rural	79,368	3.7	Mendocino Transit Authority
Alameda, Contra Costa	Urban	130,108	6.1	AC Transit
Yolo	Mixed	137,440	6.5	Yolobus
San Francisco	Urban	316,500	14.9	MTC
Sacramento	Urban	596,395	28.1	Caltrans; Sacramento County Public Works Agency
San Diego	Urban	800,000	37.7	SANDAG

Source: Calculations from Federal Transit Administration data available at http://www.fta.dot.gov/wtw.

C.3 JARC Funding by Congressional Earmark

Table C.3 JARC Funding by Congressional Earmark

County	County Type	Funding	Percentage
FY 2000		**$2,250,000**	**100%**
San Bernardino	Urban	600,000	26.7
San Diego	Urban	650,000	28.9
Los Angeles	Urban	1,000,000	44.4
FY 2001		**$8,905,365**	**100%**
Monterey	Agricultural	149,670	1.7
San Francisco	Urban	274,395	3.1
Santa Clara	Urban	498,900	5.6
Alameda and Contra Costa	Urban	498,900	5.6
Sacramento	Urban	997,800	11.2
Fresno, Tulare, Kings, Kern	Agricultural	2,993,400	33.6
Los Angeles	Urban	3,492,300	39.2
FY 2002		**$10,200,000**	**100%**
Santa Clara County	Urban	500,000	4.9
Del Norte	Rural	700,000	6.9
Alameda	Urban	2,000,000	19.6
Sacramento	Urban	2,000,000	19.6
Los Angeles	Urban	2,000,000	19.6
MTC (Bay Area)	Urban	3,000,000	29.4

Source: Calculations from Federal Transit Administration data available at http://www.fta.dot.gov/wtw.

C.4 Transportation Programs in Competitive Welfare-to-Work Grants

Table C.4 Transportation in Competitive Welfare-to-Work Grants

Round	City	Agency	Funding	Service Area	Service
Round 1	San Francisco	Private Industry Council of San Francisco, Inc.	$4,189,231	San Francisco	Support Service
Round 1	Long Beach	Community Rehabilitation Industries	$3,669,874	500 Southern LA County TANF residents with disabilities	New/Expanded Service
Round 1	Los Angeles	Catholic Charities of Los Angeles	$3,037,423	Neighborhoods of Central City South, Central City East, South Central, Hollywood, Pico Union, Boyle Heights, Wilmington, Canoga Park, Van Nuys, Venice, Crenshaw	Supportive Service (Transportation Subsidies)
Round 1	Riverside	Riverside Development Agency and Workforce Development Board	$4,450,000	Central County	Support Services
Round 2	Los Angeles	African American Unity Center	$1,323,594	South Central LA neighborhoods	Supportive Service
Round 2	San Diego	San Diego Workforce Partnership, Inc.	$5,000,000	Southeast San Diego	Develop employment in transportation
Round 2	Visalia	County of Tulare PIC	$3,824,201	485 Difficult-to-employ welfare recipients in Tulare County	Support Service
Round 3	Los Angeles	National Homes Trust	$4,906,200	Difficult to employ residents	Van
Round 3	San Rafael	Center Point, Inc.	$2,211,281	Substance abuse	Support Service
Round 3	Stockton	San Joaquin County	$4,906,962	Non-Custodial parents	Supportive Service

C.5 Transportation Programs in the Governor's 15% Funds

Table C.5 Transportation in the Governor's 15%

FY	County	Agency	Funding	Transportation Service
1998	Alameda	Youth Employment Partnership, Inc.	$1,575,154	Support Service
1998	Amador and Tuolumne	Amador-Tuolumne Community Action Agency	660,118	Support Service
1998	Contra Costa	Rubin Programs, Inc.	664,893	Support Service
1998	Contra Costa	County Social Service Department	794,031	Jobs for WtW recipients to operate shuttle service for children
1998	Contra Costa	County Social Service Department	794,031	Transportation Information Project
1998	Fresno	Fresno County Economic Opportunities Commission	781,200	Support Service
1998	Kern	Kern County Employers' Training Resource	785,280	New/Extended Service
1998	Los Angeles	Community Career Development, Inc.	1,570,560	Coordinated Transportation
1998	Orange	Vietnamese Community of Orange County	954,129	Support Service
1998	Sacramento	Sacramento County Department of Human Assistance	808,917	New/Extended Service
1998	Sacramento	Sacramento County Department of Human Assistance	808,917	New/Extended Service
1998	Sacramento	Sacramento County Department of Human Assistance	808,917	Guaranteed automobile repair pilot project
1998	Sacramento	Sacramento County Department of Human Assistance	808,917	Bicycle pilot program
1998	San Bernardino	Housing Authority of San Bernardino	943,336	Support Service
1998	Santa Cruz	Human Resources Agency of Santa Cruz	785,280	Shuttle
1998	Tehama	Learning Center of Tehama County	791,053	Support Service
1999	Alameda	American Community Partnerships	746,598	Support Service

Table C.5 Transportation in the Governor's 15% (continued)

FY	County	Agency	Funding	Transportation Service
1999	Orange	Anaheim Transportation Network	657,152	Individualized Trip Planning
1999	Orange	Anaheim Transportation Network	657,152	Taxi service to Interviews
1999	Orange	Anaheim Transportation Network	657,152	Vanpool
1999	Orange	Anaheim Transportation Network	657,152	Shuttle Service
1999	Orange	Anaheim Transportation Network	657,152	Collaboration with local transit agencies

C.6 Regional Transportation Plans and Transportation Services for the Poor

Table C.6 Transportation in Regional Transportation Plans

RTP	Plan Date	Plan Status	Transportation Providers	Program	Target Population	Goals Relating to Social Services, Welfare Populations
Alpine County Local Transportation Commission	2001	Adopted		Complete transit needs study and implement recommendations		Limited size and dispersed nature of County's population are a major reason that County involvement in mass transit or its expansion remains limited
Amador County Transportation Committee	1994	Update	Not Yet identified	Transportation Subsidies for cab services	Transit Dependent	$8,000 in subsidies for cab rides when local transit system not operating
Butte County Association of Governments	2001	Adopted	Agreement with Chico State University, Butte County Transit and Chico Area Transit System	Free Use of Transit Service	CSU students, faculty	
Calaveras Council of Governments	2001	Final	NA	General Dial-a-Ride	General Elderly, Paratransit	Goal 2 -Promote Equity for all system users (linked to Performance Measure 4 -Equity Goal 5 Objective (a) This measure will be applied when fund allocations are available from Caltrans

Table C.6 Transportation in Regional Transportation Plans (continued)

RTP	Plan Date	Plan Status	Transportation Providers	Program	Target Population	Goals Relating to Social Services, Welfare Populations
Glenn County Transportation Commission	2001	Final	Glenn Transit Service	Deviated fixed bus route	All, Glenn County Community College Students	Policy 4.1: Consider input from Social Services Transportation Advisory Council in formulating transportation service policies and programs; Goal 7: Provide alternative transportation modes consistent with demand and available resources
				Subsidized Taxi Program	Low-income, elderly disabled	Policy 4.1: Consider input from Social Services Transportation Advisory Council in formulating transportation service policies and programs; Goal 7: Provide alternative transportation modes consistent with demand and available resources
Inyo County Local Transportation Commission	2002	Adopted 2001				Assist with development of alternatives, including use of ridesharing, vanpooling, park and ride lots, flex time, telecommuting, staggered work hours
Madera County Transportation Committee	2001	Adopted	City of Chowchilla	General Public Demand response	Paratransit, elderly	
			Madera County Dept. of Public Works- Child Protective Services	Demand response system	Persons receiving SSI/SSP benefits	
Mariposa County LTC	2001	Adopted	Mariposa	Hire Transportation Coordinator	ADA, Senior Citizens	Part of Performance Monitoring
				Expand Dial-a-Ride	ADA, Senior Citizens	
Mendocino Transportation Authority	2002	Draft		Extended Hours	CalWORKs, Low-Income, All	Based on 1998 Regional Job Access Transportation Plan listed in Appendix "E"
				New/Expanded Service	CalWORKs, Low-Income, All	Based on 1998 Regional Job Access Transportation Plan listed in Appendix "E"

Table C.6 Transportation in Regional Transportation Plans (continued)

RTP	Plan Date	Plan Status	Transportation Providers	Program	Target Population	Goals Relating to Social Services, Welfare Populations
Merced County Association of Governments	2001	Adopted	Merced Transportation Company	Paratransit Dial-a-Ride	Handicapped, Elderly	Issues: UC, Merced; Welfare to Work; Policy 2.1.2: Provide adequate fixed route transit system to serve the general public, including transit-disadvantaged persons.
Transportation Agency for Monterey County	2002	Draft	Monterey Transit Service	Demand Access Responsive Transit (Dial-up service in low-density areas. Paid by JARC).		Policy 1.6 Promote access to transportation services for persons with disabilities, the elderly, youth, and persons with low income by following the guidelines for unmet transit needs as port the Transportation Development Act.
			Monterey Transit Service	Paratransit curb-to-curb (Paid by JARC)	Residents with disabilities who cannot use fixed service	
Sacramento Area Council of Governments	1999	Adopted		Programs to be funded by JARC		A new challenge for the region is the need for public transportation to jobs for people who were formerly welfare recipients. Research shows that the locations of workers and likely jobs are not always close and don't always work well with existing transit routes and schedules.
Council of San Benito Council County Governments	2001	Adopted	County Express Transit System	Dial-a-Ride	Trips start/end more than 1/2 mile from fixed route, Paratransit	Goal 7: To emphasize the preservation of existing transportation system.

Table C.6 Transportation in Regional Transportation Plans (continued)

RTP	Plan Date	Plan Status	Transportation Providers	Program	Target Population	Goals Relating to Social Services, Welfare Populations
Shasta County Regional Transportation Planning Agency	2001	Adopted	Regional Transportation Planning Agency, Consolidated Transportation Service Agency	Work to find solutions to CalWORKs transportation needs. CSTA to coordinate efforts of transportation providers.		Objectives: (Short Range) Identify the needs of CalWORKs recipients
			Riders, University	Van pool	Students	Notes senior citizen transportation needs.
San Diego Association of Governments	2000	Adopted	North County Transit District	Dial-a-Ride	All, Paratransit	
			Chula Vista Transit	Dial-a-Ride	All, paratransit	
			Chula Vista Transit	Extended Service	All, paratransit	
Santa Barbara County Association of Governments	2001	Update of 2000-2020 Plan	Chumash Indian Tribal Council	Shuttle	Native Americans	
Tahoe Regional Planning Organization	2000	Adopted			All	In most communities, the transportation system is designed to accommodate the travel demand and patterns of its resident population. In the Lake Tahoe Basin, the transportation system is expected to also accommodate the travel demand and patterns of the visitor population. Objective A: Provide specialized public transportation services with subsidized fare programs for transit, taxi, demand responsive, and accessible van services.

Table C.6 Transportation in Regional Transportation Plans (continued)

RTP	Plan Date	Plan Status	Transportation Providers	Program	Target Population	Goals Relating to Social Services, Welfare Populations
Tulare County Association of Governments	2001-02	Adopted	Tulare County Transit	Rural Route fixed route service	All, rural residents	
			Tulare County	Dial-a-Ride	All	
			Visalia City Coach	Dial-a-Ride	General, Elderly, Paratransit	
			City of Tulare	Dial-a-Ride	General, Elderly, Paratransit	
			City of Dinuba	Dial-a-Ride	Residents of Dinuba	
			City of Exeter	Dial-a-Ride	8600 Residents of Exeter	
			City of Woodlake	Dial-a-Ride	6400 Residents in city	
			City Operated Local Transit System	Demand response system	37,000 Residents of Porterville	
Tuolumne County and Cities Area Planning Council	1996	Approved	Private cab companies	Cab Direct Service	Inter-county service	Goal 6: Provide transportation for access to jobs, housing, recreation, community services for all Californians regardless of age, economic, social, or physical condition
Nevada County CTC	2001	Adopted	Nevada County Transit Services Dept.; Gold County Stage, Gold County Telecare, Inc.	Dial-a-Ride	Residents of City of Truckee	Plan lists transportation needs of area, though not specially linked to WtW or CalWORKs

Appendix D. Common Abbreviations and Acronyms

NOMECLATURE	MEANING
ABI	American Business Information data
ADA	Americans with Disabilities Act
AFDC	Aid to Families with Dependent Children
Ai	Measure of job access with labor competition
BEL	Business Establishment List
Caltrans	California Department of Transportation
CalWORKs	California Work Opportunity and Responsibility to Kids
CBD	Central business district
CBO	Community-based organization
CDSS	California Department of Social Services
COG	Council of Governments
CPS	Current Population Survey
CTEP	California Training & Education Providers database
CTNA	California Transportation Needs Assessment
CTPP	Census Transportation Planning Package
CWD	County welfare departments
DOL	U.S. Department of Labor
dij	Distance between any two block groups *i* and *j*
EDD	California State Employment Development Department
EEOC	Equal Employment Opportunity Commission
Ej	Block group employment count used in calculation of access measures
FPL	Federal Poverty Line
f(d)	Distance based weight used in calculation of access measures
FOIA	Freedom of Information Act
FTA	Federal Transit Administration
FY	Fiscal Year
GAO	U.S. General Accounting Office
GIS	Geographic Information Systems
ISTEA	Intermodal Surface Transportation Efficiency Act
JARC	Job Access and Reverse Commute
Ji	Population measure
LTF	Local Transportation Fund
MEDS	MediCal Eligibility Determination System
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MTA	Metropolitan Transportation Authority (Los Angeles)
MTC	Metropolitan Transportation Commission (Bay Area)
NPTS	Nationwide Personal Transportation Survey
OSHPD	California Office of Statewide Health Planning and Development
PIC	Private Industry Councils
Pj	Block group low-income population count used in calculation of access measures
PRWORA	Personal Responsibility and Work Opportunities Reconciliation Act
PUMS	Public Use Microdata Sample

RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agencies
SCAG	Southern California Association of Governments
STA	State Transit Assistance fund
TANF	Temporary Assistance for Needy Families
TAZ	Transportation Analysis Zone
TEA-21	Transportation Equity Act for the 21st Century
TDA	California Transportation Development Act
Wi	Job access measure
WIB	Workforce Investment Boards
WtW	Welfare-to-Work program implemented by the U.S. Department of Labor

Appendix E. High Density Census Tracts without Fixed-Route Transit

Alameda	Fresno	Imperial (cont'd)	Kern (cont'd)
60014356006	60190042094	60250116002	60290011021
60014381003	60190042095	60250116004	60290011022
60014381004	60190042096	60250117003	60290011023
60014381005	60190054074	60250117004	60290011024
60014381006	60190066021	60250118021	60290011031
60014413023	60190066024	60250118022	60290013006
60014416021		60250118024	60290015004
	Glenn	60250118025	60290019024
Colusa	60210105011	60250120001	60290020001
60110005002		60250120002	60290021002
	Imperial	60250121001	60290021004
Contra Costa	60250104001	60250121002	60290022001
60133650021	60250104002	60250121003	60290022002
60133650024	60250105002		60290022005
60133690022	60250106001	**Inyo**	60290025004
60133690023	60250107001	60270004004	60290027002
60133740001	60250107002		60290027003
60133870002	60250107004	**Kern**	60290028073
60133901003	60250109002	60290001011	60290028122
	60250109003	60290001012	60290028133
El Dorado	60250109004	60290001013	60290028152
60170301022	60250109006	60290001021	60290028161
60170301023	60250112021	60290002002	60290028162
60170302004	60250112022	60290002003	60290028163
60170302005	60250112023	60290002004	60290028171
60170302006	60250112024	60290002005	60290028172
60170303001	60250113003	60290003001	60290028173
60170303003	60250115001	60290003002	60290028191
60170303006	60250115002	60290003003	60290028192
60170303008	60250115003	60290009061	60290029001
60170303009	60250115004	60290009062	60290029002
60170304013	60250115005	60290010002	60290030001
60170304024	60250116001	60290011012	60290030004

Kern (cont'd)	Madera	Merced	Riverside
60290030005	60390003004	60470020001	60650408111
60290030006	60390003005	60470022024	60650409031
60290031033	60390005021		60650417023
60290031122	60390005024	**Mono**	60650418053
60290031132	60390006011	60510002004	60650419063
60290031143	60390006012		60650419064
60290031144	60390006013	**Monterey**	60650424021
60290031211	60390006021	60530111011	60650424092
60290031212	60390006022	60530112012	60650424112
60290031221	60390006023	60530112021	60650425083
60290063023	60390008001	60530113022	60650425171
60290063024	60390008002	60530113023	60650426054
	60390008003	60530113024	60650426062
Kings	60390008004		60650427161
60310006022	60390008005	**Orange**	60650432091
60310014003	60390008007	60590017043	60650433122
60310014004	60390009002	60590219222	60650433131
		60590638033	60650435051
Los Angeles	**Marin**	60590756054	60650452082
60371011101	60411060011	60590756074	
60371065203	60411121004	60590995105	**Sacramento**
60372972003		60591106051	60670030001
60374057004	**Mendocino**	60591106052	60670074041
60374072002	60450104003		60670074182
60374072003	60450105001	**Placer**	60670093203
60374077012	60450105002	60610210071	60670093204
60374081022	60450114004	60610211051	60670095031
60374081023	60450114006		60670096092
60375334013	60450115002		
60379005023	60450115004		
60379005031	60450116002		
60379107103	60450116004		

San Benito	San Bernardino (cont'd)	San Diego (cont'd)	San Diego (cont'd)
60690003003	60710079023	60730139052	60730168062
60690004002	60710086007	60730139053	60730168063
60690004003	60710086008	60730139054	60730170092
60690004004	60710088001	60730139061	60730170412
60690005001		60730139072	60730170481
60690005003	**San Diego**	60730139081	60730170482
60690006001	60730026022	60730139091	60730189033
60690006002	60730032081	60730139092	60730189041
60690007003	60730032083	60730142002	60730189042
	60730032085	60730146013	60730189044
	60730032091	60730149002	60730203042
San Bernardino	60730032093	60730153011	
60710001033	60730076006	60730153012	**San Joaquin**
60710001064	60730077001	60730154041	60770042013
60710001083	60730083351	60730154051	60770042014
60710003033	60730083491	60730156012	60770042033
60710003034	60730083521	60730159022	60770043021
60710003035	60730083522	60730163011	60770043022
60710003042	60730083523	60730165011	60770043023
60710013041	60730083531	60730165012	60770043051
60710017012	60730083532	60730165013	60770043061
60710026036	60730083562	60730165014	60770043063
60710026037	60730085033	60730165015	60770043064
60710027013	60730097042	60730165022	60770044012
60710032003	60730098043	60730165023	60770044013
60710032004	60730135032	60730165024	60770044014
60710034014	60730136014	60730166122	60770044015
60710034015	60730136044	60730167012	60770044022
60710034025	60730136061	60730167021	60770045003
60710034026	60730137021	60730167022	60770045004
60710034031	60730137022	60730168042	60770050011
60710040003	60730138013	60730168043	60770051082
60710044023	60730138021	60730168044	60770051083

San Joaquin (cont'd)	Santa Barbara	Stanislaus	Tulare
60770051091	60830019033	60990003042	61070004023
60770051092	60830019035	60990005071	61070005011
60770051093	60830023062	60990005072	61070005012
60770051102	60830025002	60990009121	61070005013
60770051103	60830027021	60990009122	61070006002
60770051152	60830027022	60990025022	61070006003
60770051153	60830027023	60990025023	61070007023
60770051154	60830027024	60990026052	61070007024
60770051155	60830027025	60990027011	61070015024
60770051242	60830027032	60990028012	61070016012
60770051261	60830027051	60990028022	61070016013
60770051262	60830027052	60990029023	61070016014
60770051282	60830027053	60990032012	61070026011
60770051283	60830027061	60990038014	61070026022
60770053021	60830027062	60990039062	61070026024
60770053032	60830027063		61070026025
60770053033	60830027064	**Sutter**	61070036011
60770053034	60830027065	61010501012	61070036012
60770053035	60830027071	61010501013	61070036013
60770053051	60830027081	61010501014	61070036014
60770053064	60830027082	61010501022	61070036022
60770054031	60830028024	61010501023	61070038012
60770054041		61010502012	61070038021
60770054042	**Santa Clara**	61010502021	61070038023
60770054043	60855116071	61010502025	61070039014
		61010503013	61070039023
San Luis Obispo	**Solano**	61010503021	61070041013
60790119024	60952517021	61010503022	61070044002
60790119025	60952534012	61010503024	
60790120004	60952534013	61010503025	
60790122002	60952534014	61010504002	
60790122003	60952534022	61010506044	
	60952535003		
		Tehama	
		61030011002	

Ventura
61110003013
61110003014
61110003015
61110003022
61110074042
61110084022
61110084024
Yuba
61150401003
61150401004
61150402003
61150402004
61150402006
61150402008
61150404002
61150406003
61150406005