Public Assistance Use Among Two Parent Families: An Analysis of TANF and Food Stamp Program Eligibility and Participation

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EXECUTIVE SUMMARY

In accordance with the goals of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, states increasingly are focusing on family formation and on the role of state policy in promoting and supporting healthy marriages. To understand the role of state policy in promoting marriage, we must first look to existing programs and understand the role they play in the lives of married-parent families, particularly the extent to which low-income married-parent families are eligible for various public assistance programs and the degree to which eligible married-parent families obtain benefits.

Although public assistance programs such as the Food Stamp Program (FSP) and Temporary Assistance for Needy Families (TANF) are available to low-income married-parent families, married-parent families do not use these programs to the same extent as single-parent families. For instance, TANF programs have historically targeted single-parent families. Some research on the FSP suggests that eligible married-parent families are less likely than eligible single-parent families to participate in the program. However, little research has been conducted on married-parent families' TANF and FSP eligibility and participation rates, how these rates may have changed, or how the rates compare with rates for single-parent families. Furthermore, although some research has been conducted on the factors influencing the program participation decisions of single-parent families, little attention has been given to understanding the factors influencing the participation decisions of married-parent families.

To learn about TANF and FSP eligibility and participation of two-parent families, the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, contracted with Mathematica Policy Research, Inc. (MPR) to conduct an exploratory study. The goals of this study were (1) to determine appropriate data sources, methodologies, and data definitions for analyzing program eligibility and participation; (2) to document how both TANF and FSP eligibility and participation rates among married-parent families differ from the rates among single-parent families; (3) to explore, for both family types, the factors that are associated with eligibility and participation in TANF and FSP; (4) to examine TANF and FSP eligibility and participation rates for cohabiting families; and (5) to suggest avenues for further research on the program eligibility and participation of married-parent families.

In this study, we therefore sought to answer the following questions:

1. What Are Eligibility and Participation Rates in TANF and FSP Among Married-Parent Households?

- ***What fraction of the low-income married-parent population is eligible for TANF and FSP?*** How does the eligibility rate among low-income married-parent households vary according to subgroups defined by such characteristics as the age of the household head, the ages and number of children in the household, and household income and participation status in other programs? How do eligibility rates in TANF and FSP among low-income married-parent households compare with those of low-income single-parent households?

- ***What fraction of eligible married-parent households participates in TANF and FSP?*** How does the participation rate among eligible married-parent households vary according to the subgroups described above? How do these rates compare with those of eligible single-parent households?

- ***How did eligibility and participation rates for married-parent households change during the mid- to late-1990s?*** How do trends in these rates compare with trends for single-parent households over the same period? How much of the change in participation is due to changes in the number of low-income households, changes in eligibility rates among low-income households, and changes in participation rates among the eligible?

2. What Factors Are Related to Eligibility and Participation in TANF and FSP Among Married-Parent Families?

- ***What factors are related to TANF eligibility among the low-income population?*** While TANF eligibility is clearly a function of demographic and socioeconomic factors, state program policies, and state economic conditions, does the relative importance of these factors in predicting TANF eligibility differ for married- and single-parent families?

- ***What factors are related to TANF and FSP participation among eligible married-parent families?*** To what extent do demographic and socioeconomic factors, state program policies, and state economic conditions predict participation rates among eligible families?

- ***What are the differences in factors affecting the participation rates in TANF and FSP among eligible married-parent families versus eligible single-parent families?*** Can the lower participation rates of married-parent families be explained by differences in observed characteristics of the two family types, or do married- and single-parent families make fundamentally different participation decisions, even among families with very similar observed characteristics?

3. How Do TANF and FSP Eligibility and Participation Rates of Cohabiting Households Compare to Those of Married- and Single-Parent Households?

- ***What fraction of low-income cohabiting households are eligible for TANF and FSP?*** How do eligibility rates in TANF and FSP among low-income cohabiting households compare with those of low-income married- and single-parent households?

- ***What fraction of eligible cohabiting households participates in TANF and FSP?*** How do these rates compare with those of eligible married- and single-parent households?

- ***How did eligibility and participation rates for cohabiting households change during the mid- to late-1990s?*** How do trends in these rates compare with trends for married- and single-parent households over the same period?

DATA SOURCES AND METHODOLOGICAL APPROACH

To address these questions, we used data from the Current Population Survey (CPS), a monthly survey conducted by the Bureau of Labor Statistics, and information on simulated program eligibility and participation from the Urban Institute's Transfer Income Model (TRIM3) and from MPR's Micro-Analysis of Transfers to Households (MATH®) microsimulation models. We supplement these data with state-level information on key program parameters and state economic conditions. All data are from the year 2000, the most recent year for which the microsimulation models were available at the time of the analysis. We used descriptive analytic methods to address the first and third sets of questions, and we used multivariate methods to address the second set of questions. It is important to note that the data, methods, and definitions used for these analyses were chosen to help inform the research questions of this report, rather than to provide point estimates of program caseloads. Therefore, the results presented here differ in numerous ways from official agency statistics released for TANF and FSP.

Because of ASPE's interest in keeping a common sample for determining eligibility in TANF and FSP, we examined participation and eligibility at the household level for our descriptive analysis. This also allowed us to capture characteristics of other individuals who are part of the household (such as a cohabiting partner or the parents of an unmarried mother), but are not classified as part of the family unit. Since the TANF program unit is typically the family, the unit in many cases is smaller than the household, and unit income may be smaller than household income. This is less likely to occur in the case of FSP, since the FSP program unit is typically the household. Because eligibility and participation determinations are made at the program-unit level, we aggregated the units to the household level. For the multivariate analysis, we conducted the analysis at the program unit level, but included both household- and unit-level characteristics as covariates in order to capture the characteristics of other household members that might influence program participation decisions.

To determine program eligibility, we used data simulated by the microsimulation models, as information on eligibility is not directly available from the CPS. We used these simulated data on eligibility for both the descriptive and multivariate analyses. The CPS has self-reported information on program participation, which we used for our multivariate analysis of factors related to participation. Because of underreporting of program participation in the CPS and other survey data, for our descriptive analyses we used simulated participation data from the microsimulation models, which correct for underreporting of participation.

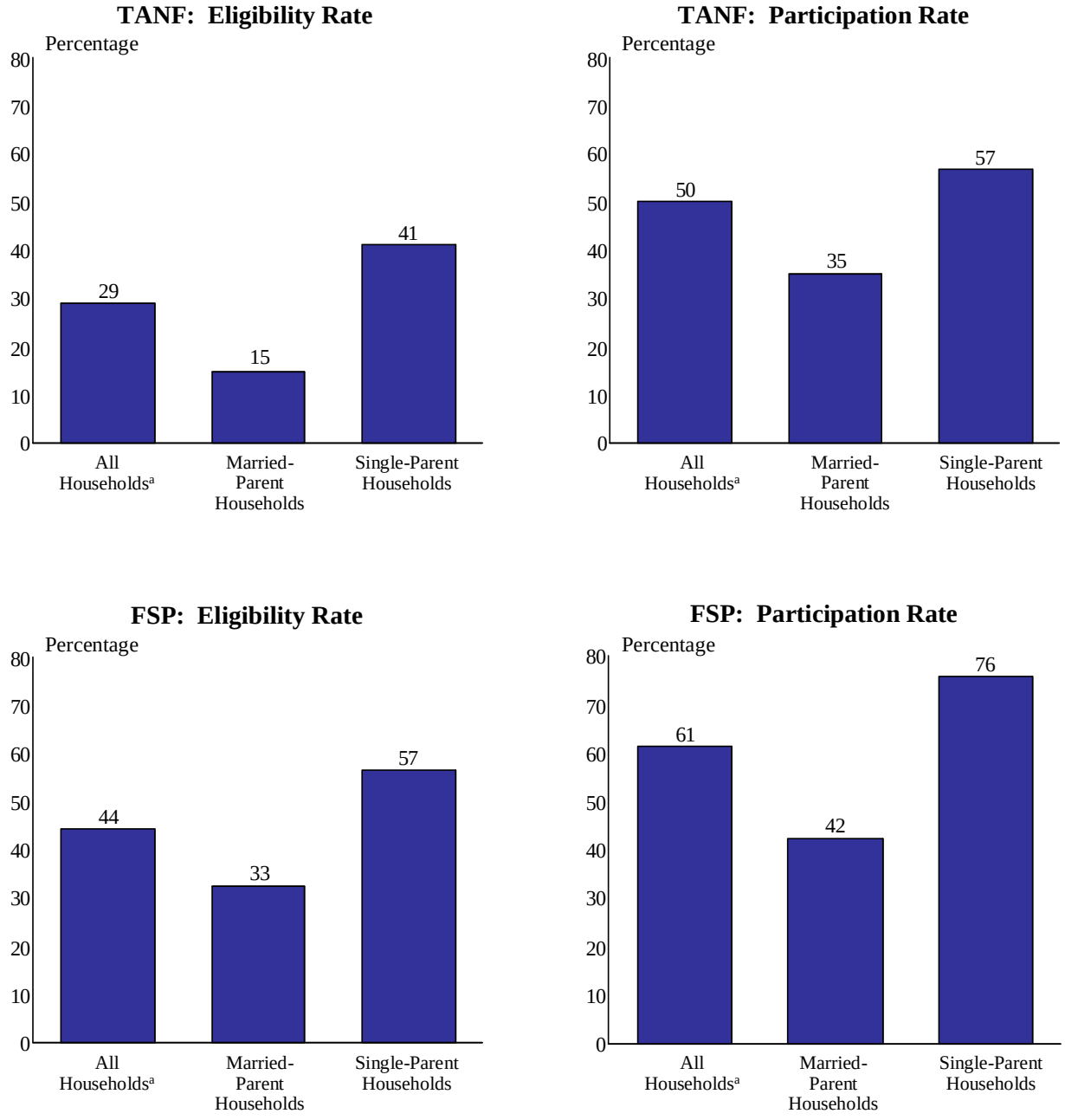
KEY FINDINGS

What Are the Eligibility and Participation Rates in TANF and FSP Among Married-Parent Households?

- ***Eligibility rates in both TANF and FSP are considerably lower for married-parent households than for single-parent households.*** Among the low-income population (households with incomes below 200 percent of the federal poverty level), only 15 percent of married-parent households were eligible for TANF, compared with 41 percent of single-parent households (Figure 1). Similarly, 33 percent of low-income

FIGURE 1

ELIGIBILITY AND PARTICIPATION RATES FOR TANF AND THE FSP, BY HOUSEHOLD TYPE, YEAR 2000



Source: Calculations from the March 2001 CPS, the Urban Institute's TRIM3 model, and the 2000 MATH CPS model, conducted by Mathematica Policy Research, Inc.

Note: Eligibility rates are computed as the percentage of all *low-income* households (income less than 200 percent of poverty level) that are eligible. Participation rates are computed as the percentage of all eligible households that participate, and are not limited to the low-income population.

[a]Includes cohabiting households.

married-parent households were eligible for FSP, compared with 57 percent of single-parent households.

- ***Participation rates in TANF and FSP are lower for married-parent households than for single-parent households.*** Only 35 percent of all eligible married-parent households participated in TANF, compared with 57 percent of eligible single-parent households. Similarly, only 42 percent of eligible married-parent households, but 76 percent of eligible single-parent ones, participated in FSP.

- ***Even within demographic and economic subgroups, married-parent households have lower eligibility and participation rates than do single-parent households.*** We examined eligibility and participation rates within subgroups based on the age of the household head, the race/ethnicity of the household head, family size, household income relative to the poverty level, and whether the household had any earnings. Within each subgroup, married-parent households had lower eligibility and participation rates in TANF and in FSP than did single-parent households. This suggests that even within these subgroups, the two household types may differ in ways that affect their TANF and FSP eligibility and participation.

- ***While participation in both TANF and FSP decreased considerably between 1996 and 2000 for both married- and single-parent households, the decline was greater for married-parent households and was more strongly linked to a reduction in participation rates among the eligible.*** Between 1996 and 2000, the number of married-parent households participating in TANF fell by about 277,000, and the number of participating single-parent households by nearly 1.4 million. While nearly all the decline in participation among married-parent households was due to a decrease in the participation rate among eligible households, this accounted for just less than half of the decline among single-parent families. During the same period, the number of married-parent households participating in FSP fell by 729,000, and the number of participating single-parent households fell by about 1.3 million. Among married-parent households, over half the decline was due to a decrease in participation rates among the eligible. The most important factor in the decline in FSP participation among single-parent households was a decrease in the number of low-income households.

What Factors Are Related to Eligibility and Participation in TANF and FSP Among Married-Parent Families?

- ***The primary factor explaining the difference in TANF eligibility rates between married- and single-parent families is the difference in their financial circumstances.*** Even within the low-income population that was the focus of the analysis, married-parent families tended have higher incomes than single-parent families, and this factor explains most of the observed differences in eligibility rates across the family types. Several other factors were also significant predictors of eligibility, including citizenship and age of youngest child, however, they were less important in explaining the differences in eligibility rates across family types.

- ***Differences in TANF and FSP participation rates across family types are not fully explained by differences in observed characteristics, suggesting that there may be unobserved behavioral differences between married- and single-parent families.*** Even among families with similar demographic and financial characteristics who live in states with similar policies and economic conditions, eligible married-parent families are considerably less likely than eligible single-parent families to participate in TANF and FSP. The fact that a broad range of demographic characteristics, financial circumstances, and state policies explain so little of the differences in participation rates across family types suggests that the differences may be due to different behavioral responses across the family types. For example, compared with single-parent families, married-parent families might be more sensitive to stigma associated with collecting public assistance, or they might be more optimistic about their future employment prospects. The differences in participation rates may also be due to differences in other unobserved factors that are correlated with both family type and program participation decisions, such as unreported income, knowledge of eligibility, and unobserved variation in how state policies are actually implemented.

How Do TANF and FSP Eligibility and Participation Rates Among Cohabiting Households Compare to Those of Married- and Single-Parent Households?

- ***Defining and identifying low-income cohabitating households in the data was challenging.*** These challenges lead to difficulties in modeling eligibility and participation. This is true especially with respect to the TANF program where the family (as opposed to the household) is the unit of observation, and income of cohabitors is treated fairly differently across states. There is considerable scope for future research in this area.

- ***TANF and FSP eligibility rates of cohabiting households are closer to those of single-parent households than those of married-parent households.*** TANF eligibility rates for cohabiting households (51 percent) were greater than those of both single- and married-parent households. FSP eligibility rates for cohabiting households (53 percent) were between those of married- and single-parent households but were closer to those of single-parent households.

- ***TANF and FSP participation rates of cohabiting households are between those of single- and married-parent households.*** TANF participation rates for cohabiting households (48 percent) were closer to those of single-parent households than those of married-parent households. FSP participation rates for cohabiting households (53 percent) were closer to those of married-parent households than to those of single-parent households.

- ***TANF and FSP eligibility and participation rates of cohabiting households fell between 1996 and 2000, mirroring trends in the rates for single-parent households.*** Between 1996 and 2000, TANF eligibility rates for cohabiting households declined by six percentage points, rates for single-parent households fell by a similar amount, and rates for married-parent households increased slightly. TANF participation rates for cohabiting households also declined over this period, by 30 percentage points,

mirroring declines of similar magnitude for both married- and single-parent households. FSP eligibility rates for cohabiting households declined by 9 percentage points, and FSP participation rates of these households declined by 17 percentage points, also mirroring similar declines for married- and single-parent families.

CONCLUSIONS

This study conducted exploratory research to learn more about factors related to eligibility and participation in TANF and FSP for married-parent families. Our analysis reveals the complexities in conducting such an analysis, including identifying appropriate data for eligibility and participation, defining family types, defining appropriate units for the analyses, and identifying methodological approaches to learn more about why eligibility and participation rates differ among the different family types.

We find that eligibility and participation rates in TANF and FSP are considerably lower for married-parent families than for single-parent families, as shown in Figure 1. Rates for cohabiting families generally lie between those of single- and married-parent families. Demographic characteristics and financial circumstances explain much of the difference in eligibility rates between married- and single-parent families. However, demographic characteristics, financial circumstances, and state program rules explain little of the observed differences in participation rates across the two family types.

This analysis suggests several avenues for further research. For instance, given the large unexplained differences that persist in participation rates between married- and single-parent families, it would be useful to learn why married-parent families have lower participation rates than single-parent families, even after controlling for numerous demographic and financial characteristics. One explanation may be related to differences in state policies for married- and single-parent households. Although we have included several policy variables that vary across states in our models, our models are unable to capture the effects of policies that differ for married- and single-parent families, but that do not vary across states. For instance, the work participation requirement for TANF is 55 hours for two-parent families compared with 30 hours for single-parent families. Although such differences may influence the participation decisions of these family types, we cannot capture them in our models if there is no variation in the rules across states. Additionally there may be unobserved state differences in the *implementation* of policies that affect married families differently than single families, and it may be useful to talk with key state officials to learn about how these policies are actually implemented for the two family types. It would also be valuable to understand the relative importance of such factors as stigma and families' failure to realize that they are eligible compared with factors that reflect the families' optimism about their future income or employment prospects. To learn more about this subject, as a starting point, it may be useful to conduct interviews or focus groups with small numbers of eligible married-parent families about their reasons for not participating in TANF and FSP. Finally, more research can be conducted on cohabiting households, who formed about 7 percent of all low-income households in the CPS.

I. INTRODUCTION

Since the enactment of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 and the creation of the Temporary Assistance for Needy Families (TANF) block grant, states have adopted many programs and policies to help families move from welfare into work. These programs and policies, aided by the strong economic conditions of the mid- to late-1990s, have led to dramatic reductions in welfare caseloads. In accordance with the goals of PRWORA, states are going beyond their initial goal of promoting employment and are also focusing on family formation and the role that states can play in promoting and supporting healthy marriages. To understand the role of state policy in promoting marriage, we must first look to existing programs and understand the role they play in the lives of married-parent families, particularly the extent to which married-parent families are eligible for various public assistance programs and the degree to which eligible married-parent families obtain benefits.

Public assistance programs are available to low-income married-parent families, but these families typically have low participation rates in these programs. For example, the Food Stamp Program (FSP) is available to help all needy families purchase food so that they can have a nutritious diet. Families are eligible if their financial resources are below certain income and asset thresholds, regardless of family composition. However, FSP participation rates among eligible married-parent families typically are half as large as rates among eligible single-parent families (50 versus 97 percent in 2000, Cunnyngham, 2004). Similarly, although the Aid to Families with Dependent Children (AFDC) cash welfare program primarily served single parents with children younger than 18, many states have expanded their welfare programs since passage of PRWORA so that low-income married-parent families can receive cash welfare. Again,

however, there is a broad perception that eligible married-parent families are less likely than eligible single-parent families to receive TANF benefits.

Some research has been conducted on the program participation decisions of single-parent families. However, little attention has been paid to understanding either the factors influencing the participation decisions of married-parent families or the reasons these families are less likely to access the programs' benefits. More fundamentally, little is known about married-parent families' eligibility and participation rates in TANF and FSP, how these rates have changed over time, and how these rates compare with rates for single-parent families. Furthermore, little is known about the eligibility and participation rates of a third type of family structure—those headed by a single parent with a cohabiting partner. A thorough understanding of these matters can provide useful information to policymakers who may be considering the potential role of state policy in ensuring that all needy families, including those headed by married and cohabiting parents, have access to the supports they need.

To learn about TANF and FSP eligibility and participation of two-parent families, the Assistant Secretary for Planning and Evaluation (ASPE), U.S. Department of Health and Human Services, contracted with Mathematica Policy Research, Inc. (MPR) to conduct an exploratory study. The goals of this study were (1) to determine appropriate data sources, methodologies, and data definitions for analyzing program eligibility and participation; (2) to document how both TANF and FSP eligibility and participation rates among married-parent families differ from the rates among single-parent families; (3) to explore, for both family types, the factors that are associated with eligibility and participation in TANF and FSP; and (4) to suggest avenues for further research on the program eligibility and participation of married-parent families. This report discusses our study findings.

The study uses data from the CPS, combined with data from microsimulation models generated by the Urban Institute and MPR. The study findings pertain to the year 2000, the most recent year for which data were available at the time of the analysis. Therefore, the analysis will not capture the effects of policy changes since 2000 such as the legislative and regulatory changes to FSP in 2001, and it will not capture changes in FSP and TANF caseload levels since the year 2000.

The report contains four chapters. In the rest of this chapter, we briefly discuss the key study questions, data sources, and methods and summarize our main findings. (Appendix A provides a more detailed description of the data we used for the analysis, definitions of key concepts, and analytic methods.) In Chapter II, we present the findings from our descriptive analyses of eligibility and participation rates in TANF and FSP among married- and single-parent families. In Chapter III, we present the findings from our multivariate analyses of factors that influence eligibility and participation decisions among married- and single-parent families. Finally, in Chapter IV, we extend our descriptive analysis to explore program eligibility and participation decisions among families headed by a single parent with a cohabiting partner.

A. KEY RESEARCH QUESTIONS

The primary objective of this study is to better understand how many low-income married-parent families participate in the TANF and FSP program and why fewer eligible married-parent families than single-parent ones may be participating. Program participation among the low-income population is the product of two factors: (1) the fraction of the low-income population that is eligible, and (2) the fraction of eligible members that participates. Thus, we need to understand issues related to both eligibility and participation in TANF and FSP among married-parent households, as well as how these rates compare with rates among single-parent and

cohabiting households. The questions we address in this study can be classified into three broad groups:

1. **What Are Eligibility and Participation Rates in TANF and FSP Among Married-Parent Households?**

   - ***What fraction of the low-income married-parent population is eligible for TANF and FSP?*** How does the eligibility rate among low-income married-parent households vary according to subgroups defined by such characteristics as the age of the household head, the ages and number of children in the household, and household income and participation status in other programs? How do eligibility rates in TANF and FSP among low-income married-parent households compare with those of single-parent households?

   - ***What fraction of eligible married-parent households participates in TANF and FSP?*** How does the participation rate among eligible married-parent households vary according to the subgroups described above? How do these rates compare with those of eligible single-parent households?

   - ***How did eligibility and participation rates for married-parent households change during the mid- to late-1990s?*** How do these trends in rates compare with trends for single-parent households over the same period? How much of the change in participation is due to changes in the number of low-income households, changes in eligibility rates among low-income households, and changes in participation rates among the eligible?

2. **What Factors Are Related to Eligibility and Participation in TANF and FSP Among Married-Parent Families?**

   - ***What factors are related to TANF eligibility among the low-income population?*** While TANF eligibility is clearly a function of demographic and socioeconomic factors, state program policies, and state economic conditions, does the relative importance of these factors in predicting TANF eligibility differ for married- and single-parent families?

   - ***What factors are related to TANF and FSP participation among eligible married-parent families?*** To what extent do demographic and socioeconomic factors, state program policies, and state economic conditions predict participation rates among eligible families?

   - ***What are the differences in factors affecting the participation rates in TANF and FSP among eligible married-parent families versus eligible single-parent families?*** Can the lower participation rates of married-parent families be explained by differences in observed characteristics of the two family types, or do married- and single-parent families make fundamentally different participation decisions, even among families with very similar observed characteristics?

3. How Do TANF and FSP Eligibility and Participation Rates of Cohabiting Households Compare to Those of Married- and Single-Parent Households?

- ***What fraction of low-income cohabiting households are eligible for TANF and FSP?*** How do eligibility rates in TANF and FSP among low-income cohabiting households compare with those of low-income married- and single-parent households?
- ***What fraction of eligible cohabiting households participates in TANF and FSP?*** How do these rates compare with those of eligible married- and single-parent households?
- ***How did eligibility and participation rates for cohabiting households change during the mid- to late-1990s?*** How do trends in these rates compare with trends for married- and single-parent households over the same period?

B. DATA SOURCES AND METHODS

Data Sources. To address the study questions, we used data from the Urban Institute's Transfer Income Model (TRIM3) and MPR's Micro-Analysis of Transfers to Households (MATH®) microsimulation models, combined with data from the Current Population Survey (CPS). From the two microsimulation models, we obtained estimates of TANF and FSP eligibility and participation rates for the year 2000, the most recent year for which data were available when we conducted our analyses. We obtained data on household demographic and socioeconomic characteristics from the CPS. The CPS also has self-reported information on program participation, which we used for our multivariate analysis of factors related to participation. Because of underreporting of program participation in the CPS and other survey data, however, for our descriptive analyses we used simulated participation data from the microsimulation models, which correct for underreporting of participation.[1]

[1] Microsimulation models provide more accurate participation estimates than survey data as they "simulate" participating households from all those that are eligible to make the simulated participant population closer in total (as well as in composition) to the participant population known from administrative data.

We obtained indicators of state policy parameters related to TANF eligibility and FSP and TANF participation from the Urban Institute's welfare rules database and other published sources (Blank and Schmidt 2001). These include variables reflecting time limit and sanctioning policies, earnings disregards, and whether there are any restrictions on eligibility or benefits to married-parent families. Finally, we obtained from published statistics a number of indicators of state economic conditions, including unemployment rate, gross weekly wages, poverty rates, and percentage of the state population living in a metropolitan area.

Key Definitions. The goal of this study is to examine issues related to TANF and FSP eligibility and participation among families with children. Therefore, we focus on households in which at least one child and at least one parent of the child are present. We classified families as single-parent families, married-parent families, and cohabiting families (those families with a single parent living with an unmarried partner). From the CPS, it is straightforward to identify married-parent families; however, distinguishing between cohabiting families and single-parent families can be more challenging. To identify these two family types, we followed a procedure described in greater detail in Appendix A. Throughout this report, eligibility rates are defined as the percentage of low-income families who are eligible for benefits, and participation rates are defined as the percentage of eligible families who received program benefits.

Because of ASPE's interest in keeping a common sample for determining eligibility in TANF and FSP, we examined participation and eligibility at the household level for our descriptive analysis. This allowed us to capture characteristics, such as income, of other individuals who are part of the household (such as a cohabiting partner or the parents of an unmarried mother), but are not classified as part of the family unit. Since the TANF program unit is typically the family, the unit in many cases is smaller than the household, and unit income may be smaller then household income. This is less likely to occur in the case of FSP, since the

FSP program unit is typically the household. Because eligibility and participation determinations are made at the program-unit level, we aggregated the units to the household level for the descriptive analysis, as described in more detail in Appendix A. For the multivariate analysis, we instead conducted the analysis at the program unit level, but we defined the sample based on total household, rather than family, income. We also included both household- and unit-level characteristics as covariates in order to capture the characteristics of other household members that might influence program participation decisions.

Study Sample. Our analyses in Chapters II and III include all *married-* and *single-parent* families with total household income under 200 percent of the federal poverty level. Our analysis in Chapter IV focuses on *cohabiting* families with total household income under 200 percent of the poverty level. Household income includes all types of cash income (for example, social security, supplemental security income, and retirement income) except TANF income. Setting the income level at 200 percent of poverty ensures that we capture almost all families eligible for TANF and FSP. About 35 percent of all households containing families with a child and at least one parent had incomes below 200 percent of the poverty level.

Methodological Approach. We conducted both descriptive and multivariate analyses in our study. The descriptive analysis provides information on eligibility and participation rates for married- and single-parent families, as well as for key subgroups. The multivariate analysis examines the role of demographic factors, program policy variables, and state economic conditions in determining participation in the TANF and FSP. We also estimated models with state fixed effects to capture any variation across states, including variation in state policies and the states' economic conditions that we cannot capture with our policy variables. Finally, we estimated separate models for the two family types. We used the results of these models to decompose the raw differences in eligibility and participation rates into (1) the portion that is

explained by differences in the underlying factors and (2) the portion that is unexplained by differences in the underlying factors and therefore may suggest behavioral differences between married- and single-parent families or unobserved differences in how the implementation of state policies affects the two family types.

It is important to note that the data, methods, and definitions used for these analyses were chosen to help inform the research questions described in this report, rather than to provide point estimates of program caseloads. Therefore, the results presented here differ in numerous ways from official agency statistics released for TANF and FSP.

C. SUMMARY OF FINDINGS

Overall, we find that low-income married-parent households are considerably less likely than low-income single-parent ones to be eligible for TANF and FSP. For example, low-income married-parent households were 26 percentage points less likely than single-parent households to be eligible for TANF, and about 24 percentage points less likely to be eligible for FSP. More significantly, even among eligible families, married-parent families were considerably less likely to participate than single parent families—participation rates in TANF and FSP among eligible married-parent families were 22 to 34 percentage points lower, respectively, than they were for eligible single-parent ones. These lower rates of eligibility and participation are observed for almost all key subgroups.

We also find that the number of households participating in both TANF and FSP decreased considerably during the mid- to late-1990s, by 1.7 million and 2.1 million, respectively, between 1996 and 2000. For both programs, most of the decline can be explained by decreases in participation rates among eligible low-income households; however, decreases in both the number of low-income households and the eligibility rates among these households also contributed to the overall decreases in participation over this period.

The primary factor explaining the difference in TANF eligibility rates between married- and single-parent families is the difference in their financial circumstances, with demographic characteristics and family structure explaining much less of the difference.[2] TANF and FSP participation are naturally much harder to explain. The differences in characteristics between single- and married-parent families account for very little of the difference in participation rates, suggesting that the two types of families make fundamentally different decisions or may perceive themselves as having different options available even when finding themselves in similar situations. The findings also suggest that other unobserved factors correlated with both family type and program participation decisions, such as unreported income, may be omitted from the analysis. Although state program rules and economic conditions are related to participation, they do not explain much of the underlying differences in responses across family types. It is important to note, however, that we can only include in our models policies that vary across states. We are therefore unable to include policies such as the TANF work requirement rule, which imposes higher hours of work for married-parent families (55 hours) than for single-parent families (30 hours) and may contribute to the differences in participation rates between the two family types. In addition, there may be policy factors that are not readily observed, such as differences in how state programs are actually implemented in the field for the two family types, that could affect participation but would not be captured in this analysis.

Our analysis of cohabiting families indicates that, in general, their eligibility and participation rates lie between those of married- and single-parent families and typically are closer to the rates of single-parent families than to those of married-parent ones. Trends in the

[2] We do not analyze factors associated with FSP eligibility across family types, as FSP eligibility is determined at the federal level, and differences across family types are unlikely to be attributable to variation in program rules across states.

eligibility and participation rates of cohabiting families during the 1990s are similar to those of both married- and single-parent families.

II. ELIGIBILITY AND PARTICIPATION RATES IN TANF AND FSP

In this chapter, we use data from the CPS, combined with data from the MATH CPS and TRIM3 microsimulation models, to examine the eligibility and participation rates of married-parent households in TANF and FSP. Specifically, we examine the following questions:

- What fraction of the low-income married-parent population is eligible for TANF and FSP?
- What fraction of eligible married-parent households receives TANF and FSP benefits?
- How do these estimates vary by key demographic and economic subgroups?
- How do these estimates compare with estimates for single-parent households?
- How have these rates changed over time?

Overall, we find that TANF and FSP eligibility rates among low-income households with children are consistently lower for married-parent households than for single-parent households. Participation rates among those eligible also are consistently lower for married-parent households than for single-parent ones. These findings may reflect the fact that, even among the low-income population, single-parent families tend to have higher need levels than married-parent families. In addition, historically, single-parent households have been targeted for TANF; this may also contribute to their relatively high participation rates in both TANF and FSP.[1]

For all the demographic and economic subgroups we examined, we observe lower eligibility and participation rates for married-parent families than for single-parent families. Not surprisingly, we find that poorer households and households with no earnings are more likely to be eligible and to have higher participation rates among both single- and married-parent families.

[1] In Chapter III, we attempt to better understand the factors associated with these differences in eligibility and participation rates across household types.

Even within these subgroups, however, married-parent families have considerably lower eligibility and participation rates than do single-parent ones.

In the rest of this chapter, we discuss TANF and FSP eligibility and participation rates, overall and by household type. We then examine eligibility and participation rates, by household type, for key subgroups. Finally, we describe trends in eligibility and participation rates over time.

A. TANF AND FSP ELIGIBILITY AND PARTICIPATION RATES, OVERALL AND BY HOUSEHOLD TYPE

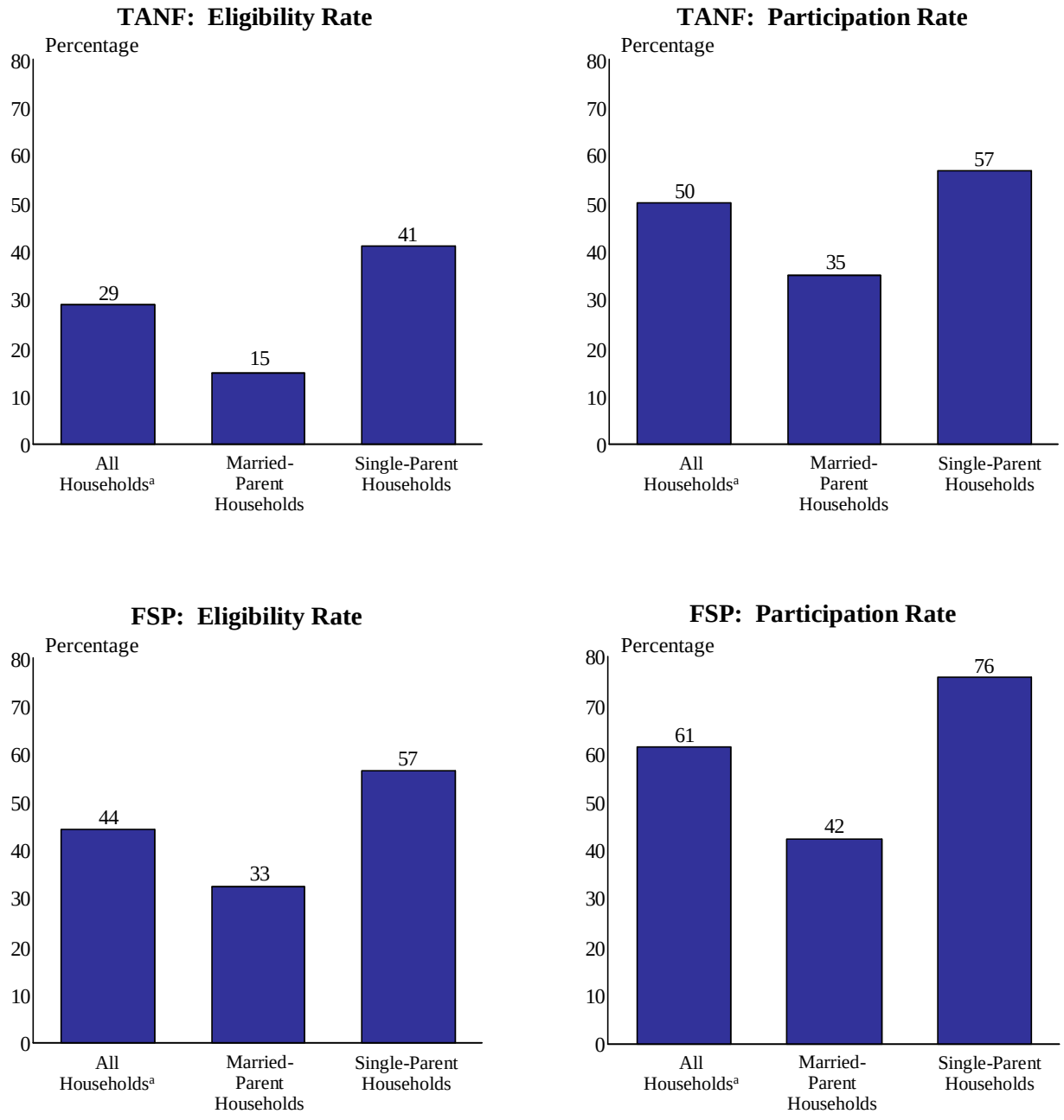
Almost half (49 percent) of all low-income households are headed by married-parents, and 45 percent are headed by single parents (calculated from column 1 in Table II.1).[2] For these households, we examined eligibility and participation rates. We define the eligibility rate as the fraction of low-income households (those with incomes below 200 percent of the poverty level) eligible to receive benefits. Participation rates are calculated as the fraction of eligible households who participate (and may include some households with incomes greater than 200 percent of the poverty level, since it is possible that some eligible families live in higher income households).

TANF Eligibility Rates. Nearly 30 percent of all low-income households are eligible for TANF (Figure II.1 and Table II.1). Low-income married-parent households have considerably lower eligibility rates than low-income single-parent households (15 and 41 percent, respectively; Figure II.1). Although all the households in the sample have incomes below 200 percent of the poverty level, even within this range, married-parent households tend to have higher incomes than single-parent households, which would help explain why married-parent

[2] The remaining seven percent of households are headed by cohabiting parents, discussed in Chapter IV.

FIGURE II.1

ELIGIBILITY AND PARTICIPATION RATES FOR TANF AND THE FSP, BY HOUSEHOLD TYPE, YEAR 2000



Source: Calculations from the March 2001 CPS, the Urban Institute's TRIM3 model, and the 2000 MATH CPS model, conducted by Mathematica Policy Research, Inc.

Note: Eligibility rates are computed as the percentage of all *low-income* households (income less than 200 percent of poverty level) that are eligible. Participation rates are computed as the percentage of all eligible households that participate, and are not limited to the low-income population.

[a]Includes cohabiting households.

TABLE II.1

NUMBER OF LOW-INCOME, ELIGIBLE, AND PARTICIPATING HOUSEHOLDS AND ELIGIBILITY AND PARTICIPATION RATES FOR TANF AND THE FSP, YEAR 2000

	Under 200 Percent of Poverty			All Eligible		
	All (in Millions)	Eligible (in Millions)	Eligibility Rate	All (in Millions)	Participating (in Millions)	Participation Rate
TANF						
All households[a]	10.9	3.2	29	3.6	1.8	50
Married-parent households	5.3	0.8	15	0.9	0.3	35
Single-parent households	4.9	2.0	41	2.2	1.3	57
FSP						
All households[a]	11.8	5.2	44	5.4	3.3	61
Married-parent households	5.9	1.9	33	2.0	0.8	42
Single-parent households	5.1	2.9	57	3.0	2.2	76

Source: Calculations from the March 2001 CPS, the Urban Institute's TRIM3 model, and the 2000 MATH CPS model, conducted by Mathematica Policy Research, Inc.

Notes: The numbers and rates presented for TANF represent an average of the 12-month values across 2000. The numbers and rates for the FSP represent values for a typical month during year 2000. The number of low-income households across the two models differs because of different methodologies used to allocate annual income across the months and different methodologies used to calculate the average or typical months.

[a]Includes cohabiting households.

households have lower eligibility rates. Married-parent households may also have additional assets, other unmeasured income, or other characteristics not observed in the data that make them relatively less likely to be eligible.

TANF Participation Rates. Only about half of all eligible households with children receive TANF benefits. Among eligibles, TANF participation rates for married-parent households are substantially lower than those for single-parent households (Figure II.1). Overall, 35 percent of all eligible married-parent households receive TANF benefits, compared with 57 percent of eligible single-parent households.

FSP Eligibility Rates. Overall, FSP eligibility rates among low-income households are higher than TANF eligibility rates for the same sets of low-income households. For example, 44 percent of low-income households are eligible for FSP, whereas only about 30 percent of these households are eligible for TANF (Figure II.1).[3] These findings are consistent with the fact that the net income eligibility for FSP is 100 percent of the poverty level.[4] In contrast, the needs standards that states use to determine TANF eligibility are considerably lower, falling between 40 and 80 percent of the poverty level in most states.[5]

[3] FSP eligibility and participation rates discussed in this report may not match rates discussed in other Food and Nutrition Service (FNS) studies conducted by MPR. The estimates of the number of FSP-eligible households presented here are from the 2000 MATH CPS model, while the other estimates are based on a file derived from the 2000 MATH CPS model. The estimates of the number of participants presented here also are from the 2000 MATH CPS model, while other studies use administrative data. Since those administrative data are not detailed enough to give us an accurate measure of cohabiting households (discussed in Chapter IV), we chose to use the simulated measure of participation from the 2000 MATH CPS model. However, we ratio-adjusted the number of participants to reflect the higher levels of participation indicated by the administrative data.

[4] Net income is gross income minus allowable deductions, including a 20 percent deduction from earned income, a standard deduction for all households, a dependent care deduction, certain medical expenses, legally owed child support payments, and certain shelter costs.

[5] These needs standards were the ones used under the AFDC program; most states have not changed their needs standards much since the TANF legislation was passed.

Eligibility rates for married-parent households are lower than rates for single-parent households, even though most FSP eligibility rules do not take household composition into account. For example, about 33 percent of married-parent households are eligible for FSP, compared with 57 percent of single-parent ones. As in our examination of TANF eligibility, although we considered only households with incomes below 200 percent of the poverty level, married-parent households, even in this low-income population, tend to have higher levels of income and assets than do single-parent households.

FSP Participation Rates. Just as FSP eligibility rates are higher than TANF eligibility rates, FSP participation rates are higher than TANF participation rates. For example, just over 60 percent of FSP-eligible households participate in FSP; in comparison, 50 percent of TANF-eligible households participate in TANF (Figure II.1). Also similar to the patterns observed thus far, eligible married-parent households are less likely to participate in FSP than are eligible single-parent households; these differences are even more pronounced than the differences in TANF participation rates. Only about 42 percent of eligible married-parent households participate in FSP, compared with 76 percent of eligible single-parent ones.[6]

B. ELIGIBILITY AND PARTICIPATION RATES, BY KEY SUBGROUPS

In addition to determining overall eligibility and participation rates, it is also useful to know which groups of low-income households are most likely to be eligible and who among those eligible are most likely to participate. To understand these patterns, we examined eligibility and participation among a few key demographic and economic subgroups. The following discussion presents our subgroup findings separately for program eligibility and for program participation.

[6] We observed these patterns of FSP eligibility and participation regardless of whether we used simulations from the TRIM3 model or the MATH CPS model.

After presenting these findings for the overall sample, we examine how eligibility and participation patterns vary by household type.

1. TANF and FSP Eligibility, by Subgroups

The overall TANF and FSP eligibility rates for various subgroups reflect what one would expect given program eligibility rules (Tables II.2 and II.3). Low-income households with younger heads; heads who are black, non-Hispanic; and heads who have more children are more likely to be eligible than are other low-income households.[7] As expected, eligibility for both TANF and FSP is also highly correlated with the economic characteristics of the household. Among the low-income population, households with relatively higher incomes (50 to 200 percent of the poverty line) tend to have higher participation rates in FSP than in TANF. This is consistent with the higher income cut-off for FSP.[8] Not surprisingly, households that participate in FSP also are much more likely to be eligible for TANF than those who do not participate.

While eligibility in both TANF and FSP varies considerably by key demographic subgroups, the patterns with respect to marital status are consistent across subgroups—eligibility rates among married-parent households are lower than those of single-parent households for every subgroup examined. For both programs, the percentage point difference in eligibility rates between single and married-parent households is narrower for households with higher income levels, with older heads, and with fewer children.

[7] The pattern of findings is similar when we examine the ages and races of the parents rather than of the reference person, largely because the reference person in most households is the parent.

[8] As discussed earlier, households are classified as "eligible" for this analysis if they include one or more eligible families. Therefore, among eligible households with income greater than 100 percent of the poverty level, it is likely that the income of the eligible family or families within the unit is considerably lower.

TABLE II.2

TANF ELIGIBILITY RATES, BY KEY DEMOGRAPHIC AND ECONOMIC SUBGROUPS, YEAR 2000
(Percentages)

		Household Type	
	All Households[a]	Married-Parent	Single-Parent
All	29	15	41
Demographic Subgroups			
Age of Household Reference Person			
Younger than 25	42	15	55
25 to 34	28	14	40
35 to 44	24	15	35
45 or older	31	18	42
Race/Ethnicity of Household Reference Person			
Hispanic	31	18	47
White, non-Hispanic	25	13	37
Black, non-Hispanic	37	14	43
Other	31	19	45
Number of Children in Household			
1	28	13	35
2 or 3	28	14	42
4 or 5	37	21	59
6 or more	41	26	76
Economic Subgroups			
Household Income as a Percentage of the Federal Poverty Level			
Less than 50	83	68	89
50 to 99	33	23	38
100 to 129	16	8	17
130 to 200	8	3	11
Presence of Earnings			
Household has earnings	20	11	27
Household does not have earnings	68	47	75
FSP Participation			
Household participates	66	53	69
Household does not participate	12	9	13

Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

[a]Includes cohabiting households.

TABLE II.3

FSP ELIGIBILITY RATES, BY KEY DEMOGRAPHIC AND ECONOMIC SUBGROUPS, YEAR 2000
(Percentages)

		Household Type	
	All Households[a]	Married-Parent	Single-Parent
All	44	33	57
Demographic Subgroups			
Age of Household Reference Person			
Younger than 25	57	36	70
25 to 34	46	34	60
35 to 44	42	33	53
45 or older	37	28	47
Race/Ethnicity of Household Reference Person			
Hispanic	48	42	59
White, non-Hispanic	37	26	51
Black, non-Hispanic	56	36	62
Other	39	32	53
Number of Children in Household			
1	42	30	51
2 or 3	43	30	59
4 or 5	55	46	68
6 or more	64	56	85
Economic Subgroups			
Household Income as a Percentage of the Federal Poverty Level			
Less than 50	76	60	86
50 to 99	74	66	81
100 to 129	54	43	68
130 to 200	4	1	6
Presence of Earnings			
Household has earnings	37	30	45
Household does not have earnings	70	47	82
TANF Participation			
Household participates	86	71	90
Household does not participate	40	31	50

Source: Calculations from data from Mathematica's 2000 MATH CPS model.

[a]Includes cohabiting households.

2. TANF and FSP Participation, by Subgroups

Participation rates among eligibles also vary considerably across some demographic and economic subgroups (Tables II.4 and II.5). Both TANF and FSP participation rates vary widely according to the number of children in the household, although, surprisingly, TANF participation rates are lower for households with greater numbers of children than for households with fewer children. Participation rates also vary considerably by income level, particularly for FSP, and are generally lower for households with higher income levels.[9] Participation rates in both programs are considerably higher for households with no earnings than for households with earnings.

Patterns of program participation across subgroups differ in interesting ways for married- and single-parent households. For instance, while the TANF participation rate among married households is generally higher among households with older heads, TANF participation rates among single-parent families vary little by age of head. While participation rates for both programs tend to be lower for households with higher income levels, TANF participation rates are considerably higher for single-parent households than for married-parent households at every income level, for both TANF and FSP. Differences in participation rates between married- and single-parent households in the various subgroups we examined tend to be larger for FSP than for TANF.

[9] In both programs, households with incomes between 130 and 200 percent of the poverty level are more likely to participate than those with slightly lower relative incomes. It is possible that those eligible at such high household income levels may have other characteristics that increase the likelihood of participation. Furthermore, household income in these higher-income eligible households is likely to include the income of household members whose income is not counted toward the eligibility of the participating family within the household. This income also may not be available to the family when they apply for TANF, if the other household members do not provide financial assistance to the eligible family. In addition, the sample sizes of these subgroups are relatively small, so the estimates may be somewhat imprecise.

TABLE II.4

TANF PARTICIPATION RATES, BY KEY DEMOGRAPHIC AND ECONOMIC SUBGROUPS, YEAR 2000
(Percentages)

		Household Type	
	All Households[a]	Married-Parent	Single-Parent
All	50	35	57
Demographic Subgroups			
Age of Household Reference Person			
Younger than 25	51	27	58
25 to 34	49	33	56
35 to 44	49	31	57
45 or older	54	45	58
Race/Ethnicity of Household Reference Person			
Hispanic	48	33	59
White, non-Hispanic	52	34	60
Black, non-Hispanic	51	38	54
Other	46	43	49
Number of Children in Household			
1	62	37	67
2 or 3	45	34	51
4 or 5	45	37	52
6 or more	37	22	52
Economic Subgroups			
Household Income as a Percentage of the Federal Poverty Level			
Less than 50	57	39	63
50 to 99	39	29	45
100 to 129	40	23	43
130 to 200	51	39	55
Presence of Earnings			
Household has earnings	44	30	50
Household does not have earnings	61	46	65
FSP Participation			
Household participates	68	64	68
Household does not participate	10	8	12

Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

[a]Includes cohabiting households.

TABLE II.5

FSP PARTICIPATION RATES, BY KEY DEMOGRAPHIC AND ECONOMIC SUBGROUPS, YEAR 2000
(Percentages)

		Household Type	
	All Households[a]	Married-Parent	Single-Parent
All	61	42	76
Demographic Subgroups			
Age of Household Reference Person			
Younger than 25	63	33	76
25 to 34	65	45	81
35 to 44	59	42	75
45 or older	58	44	66
Race/Ethnicity of Household Reference Person			
Hispanic	52	39	71
White, non-Hispanic	60	44	75
Black, non-Hispanic	73	49	79
Other	56	45	74
Number of Children in Household			
1	59	40	71
2 or 3	61	40	75
4 or 5	69	48	92
6 or more	78	69	96
Economic Subgroups			
Household Income as a Percentage of the Federal Poverty Level			
Less than 50	88	69	98
50 to 99	57	40	72
100 to 129	19	11	20
130 to 200	49	23	70
Presence of Earnings			
Household has earnings	46	35	57
Household does not have earnings	90	70	98

Source: Calculations from data from Mathematica Policy Research's 2000 MATH CPS Model.

[a]Includes cohabiting households.

C. CHANGES IN ELIGIBILITY AND PARTICIPATION RATES OVER TIME

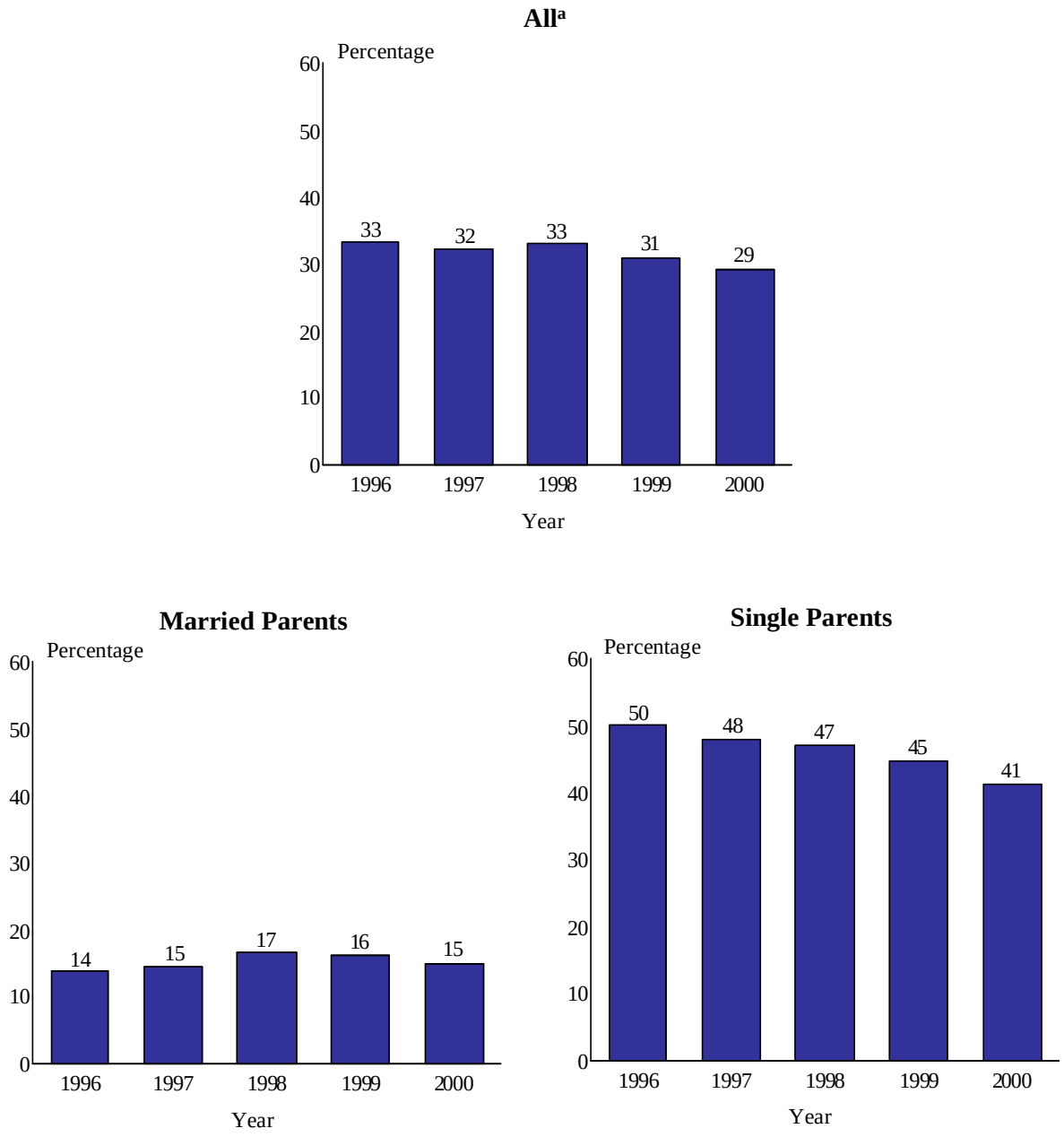
The welfare reform legislation of 1996 and the strong economic conditions that prevailed during most of the mid- to late-1990s led to dramatic reductions in TANF and FSP caseloads over much of that period. The reductions in the caseloads may have been due to reductions in the number of low-income households, reductions in the eligibility rate among these households, reductions in the participation rates of these households, or a combination of these factors. In this section, we examine trends in TANF and FSP eligibility and participation among eligible households, using data from the TRIM3 models for the years 1996 through 2000.

TANF Eligibility Rates. Between 1996 and 2000, TANF eligibility rates among all low-income households fell slightly, from 33 percent in 1996 to 29 percent in 2000. TANF eligibility rates for married-parent households remained almost constant, increasing by only one percentage point, while eligibility rates for single-parent households fell by about nine percentage points (Figure II.2). The decline in eligibility rates for single-parent households may reflect improving economic circumstances of these households, even among the low-income population, changes in household composition, changes in eligibility rules affecting these families, or some combination of these factors.

TANF Participation Rates. In contrast to our observations on TANF eligibility rates, we observed large reductions in TANF participation rates among both married- and single-parent households. As Figure II.3 shows, TANF participation rates among eligible single-parent households fell by 24 percentage points between 1996 and 2000, from 81 to 57 percent. The participation rates for married-parent households fell by 30 percentage points, from 65 to 35 percent. Toward the end of the period (in 1999 and 2000), we observe a slight increase in

FIGURE II.2

TRENDS IN TANF ELIGIBILITY RATES,
1996 TO 2000



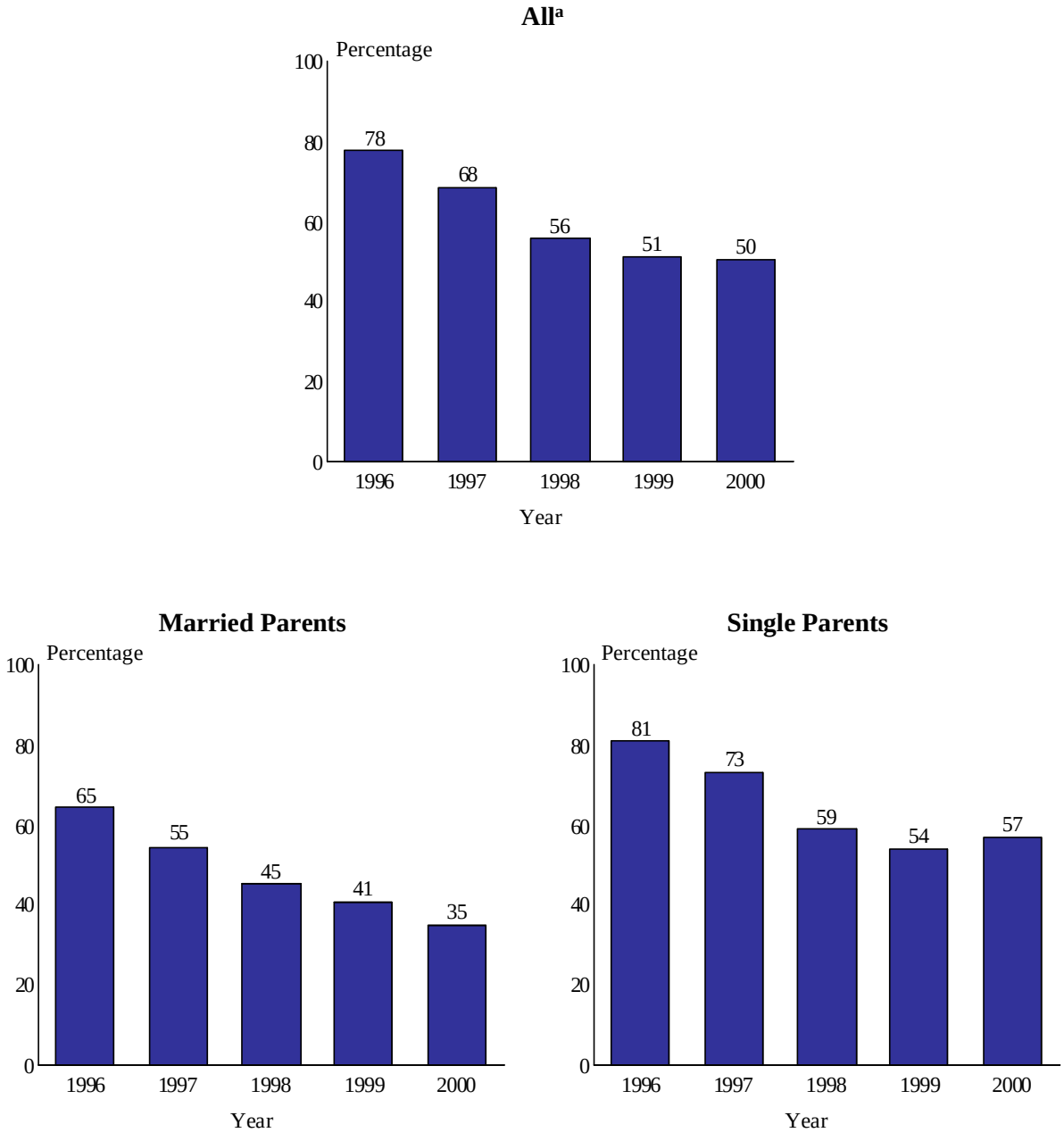
Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

Note: Eligibility rates are computed as the percentage of all *low-income* households (income less than 200 percent of poverty level) that are eligible.

[a]Includes cohabiting households.

FIGURE II.3

TRENDS IN TANF PARTICIPATION RATES,
1996 TO 2000



Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

Note: Participation rates are computed as the percentage of all eligible households that participate.

[a]Includes cohabiting households.

TANF participation rates for single-parent households, perhaps a result of the slightly weaker economic conditions that were starting to emerge then.

Overall Decline in TANF Participation. Between 1996 and 2000, the total number of low-income households participating in TANF fell by 1.7 million (Table II.6). The number of participating households is a function of the number of low-income households, the eligibility rate among low-income households, and the participation rate among eligible low-income households, and we can decompose the overall decline in participation into the change due to each of these components.[10] The sharp decline in participation rates over this period is responsible for over half of the decline in total participation, accounting for approximately 61 percent of the overall decline in the number of participating households. The decrease in the number of low-income households accounts for 22 percent of the decline, and the decrease in eligibility rates accounts for only 17 percent.[11] Among married-parent households, approximately 92 percent of the decline in the number of participating households can be attributed to the decline in participation rates and 20 percent to the decline in the low-income population—both these decreases were slightly offset by the increase in eligibility rates for married-parent households over this period. Among single-parent households, approximately 46 percent of the overall decrease in TANF participation is attributable to the decrease in participation rates, while 29 percent is attributable to the decrease in the number of low-income single-parent households and 25 percent is attributable to the eligibility rate among these households.

[10] See Appendix A for details of this decomposition.

[11] In order to obtain comparable eligibility and participation rates for the decomposition analysis, we computed participation rates as the percentage of *low-income* eligible households that participate. These rates may differ slightly from the participation rates presented earlier which were not limited to the low-income population, since a small number of eligible families live in households with incomes greater than 200 percent of the poverty threshold.

TABLE II.6

CHANGE IN TANF PARTICIPATION AMONG THE LOW-INCOME POPULATION, 1996 TO 2000

	1996	2000	Change, 1996 to 2000	Resulting Decrease in Number of Participants (1,000s)	Resulting Decrease in Number of Participants Percentage
All Households[a]					
Participants (1,000s)	3,323	1,584	-1,739		
Low Income (1,000s)	12,846	10,937	-1,909	-380	21.8
Eligibility rate (percentage)	33.2	29.2	-4.0	-301	17.3
Participation rate (percentage)	78.0	49.6	-28.4	-1,053	60.6
Married-Parent Households					
Participants (1,000s)	543	267	-277		100.3
Low Income (1,000s)	6,116	5,323	-793	-56	20.2
Eligibility rate (percentage)	13.8	15.1	1.2	34	-12.2
Participation rate (percentage)	64.1	33.3	-30.9	-255.3	92.3
Single-Parent Households					
Participants (1,000s)	2,507	1,141	-1,366		99.5
Low Income (1,000s)	6,112	4,868	-1,244	-394	28.8
Eligibility rate (percentage)	50.1	41.3	-8.9	-337	24.7
Participation rate (percentage)	81.8	56.8	-25.0	-628.3	46.0

Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

[a]Includes cohabiting households.

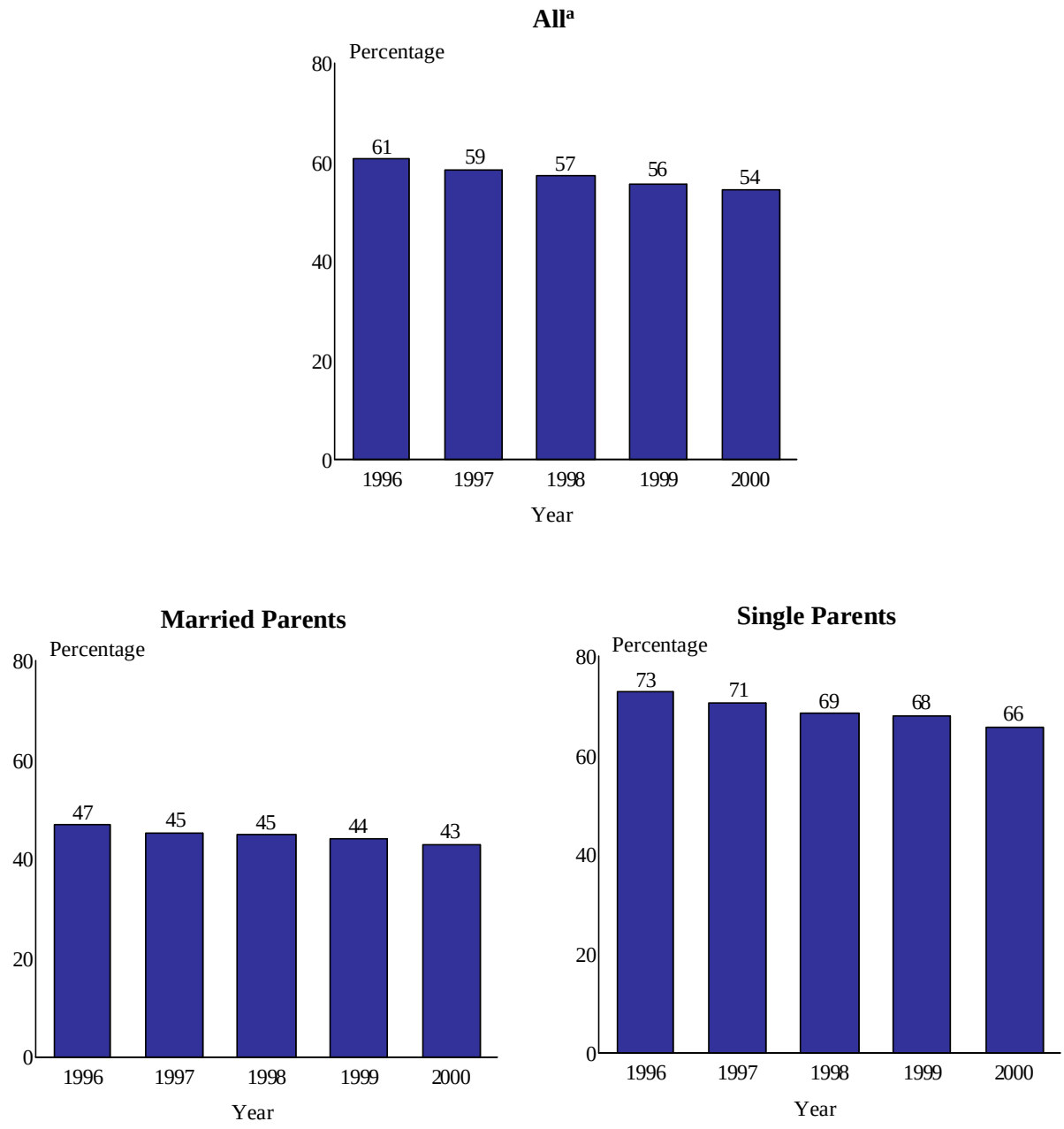
FSP Eligibility Rates. During the mid- to late-1990s, FSP eligibility rates fell steadily for both married- and single-parent households. Eligibility rates across all low-income households fell from 61 percent eligible in 1996 to 54 percent eligible in 2000 (Figure II.4). Among low-income married-parent households, the rates dropped by about four percentage points, from 47 to 43 percent. The eligibility rate for single-parent households fell seven percentage points, from 73 percent in 1996 to 66 percent in 2000.

FSP Participation Rates. Participation rates for FSP followed the same pattern as participation rates for TANF. Participation rates fell from 1996 to 2000, but most of the changes occurred between 1996 and 1998. Across all eligible households, participation rates fell from 73 percent in 1996 to 59 percent in 2000 (Figure II.5). Participation rates for married-parent households fell from 52 to 33 percent, with most of the reductions occurring during the early part of the period. Participation rates for single-parent households fell from 85 to 77 percent; the largest reductions were between 1996 and 1998. In fact, we start seeing a slight increase in participation after 1998.

Overall Decline in FSP Participation. The number of low-income households participating in FSP fell by 2.1 million between 1996 and 2000 (Table II.7). While falling participation rates were, again, a primary factor (accounting for 43 percent of the decline), declines in the number of low-income households and the eligibility rate among these households also played significant roles, accounting for 34 and 23 percent of the decline, respectively. Most (approximately 67 percent) of the decline in the number of married-parent households can be explained by the decline in participation rates among eligible low-income

FIGURE II.4

TRENDS IN FSP ELIGIBILITY RATES,
1996 TO 2000



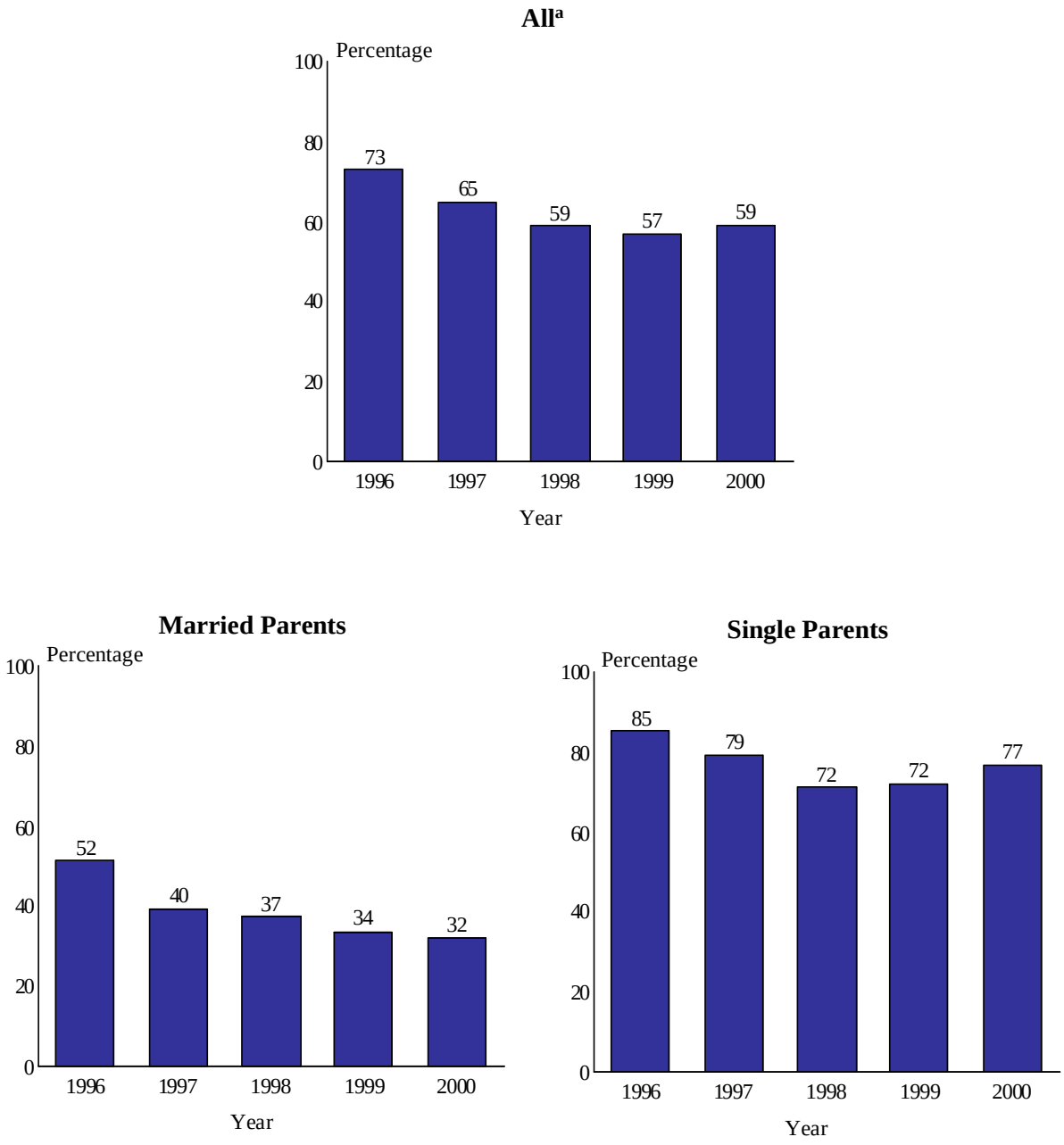
Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

Note: Eligibility rates are computed as the percentage of all *low-income* households (income less than 200 percent of poverty level) that are eligible.

[a]Includes cohabiting households.

FIGURE II.5

TRENDS IN FSP PARTICIPATION RATES,
1996 TO 2000



Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

Note: Participation rates are computed as the percentage of all eligible households that participate.

[a]Includes cohabiting households.

TABLE II.7

CHANGE IN FSP PARTICIPATION AMONG THE LOW-INCOME POPULATION, 1996 TO 2000

	1996	2000	Change, 1996 to 2000	Resulting Decrease in Number of Participants (1,000s)	Resulting Decrease in Number of Participants Percentage
All Households[a]					
Participants (1,000s)	5,591	3,487	-2,103		
Low Income (1,000s)	12,846	10,937	-1,909	-716	34.0
Eligibility rate (percentage)	60.5	54.4	-6.1	-474	22.5
Participation rate (percentage)	72.0	58.6	-13.3	-910	43.3
Married-Parent Households					
Participants (1,000s)	1,452	723	-729		
Low Income (1,000s)	6,116	5,323	-793	-146	20.1
Eligibility rate (percentage)	47.0	42.9	-4.1	-96	13.2
Participation rate (percentage)	50.5	31.7	-18.9	-485	66.5
Single-Parent Households					
Participants (1,000s)	3,774	2,461	-1,313		
Low Income (1,000s)	6,112	4,868	-1,244	-697	53.1
Eligibility rate (percentage)	72.9	65.7	-7.1	-317	24.1
Participation rate (percentage)	84.7	76.9	-7.8	-298	22.7

Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

[a]Includes cohabiting households.

households. For single-parent households, however, the decline in FSP participation was driven primarily by the decline in the number of low-income single-parent households, which accounts for approximately 53 percent of the overall decrease in FSP participation among these households.

III. ANALYSIS OF FACTORS RELATED TO ELIGIBILITY AND PARTICIPATION

As the previous chapter shows, there are striking differences in TANF and FSP eligibility and participation rates between married- and single-parent households. Among the low-income population, married-parent households are considerably less likely than single-parent households to be eligible for TANF or FSP. Among those eligible, married-parent households are considerably less likely than single-parent ones to participate in TANF or FSP. Policymakers are interested not only in the magnitude of these differences, but also in explanations for them.

There are several possible reasons why eligibility and participation rates may differ across family types. First, the observable demographic and financial characteristics of married-parent families may differ from those of single-parent families in ways that are correlated with program eligibility or participation. For instance, if low-income married-parent families are better off financially than low-income single-parent families, they would be less likely to be eligible for TANF or FSP, and may be less likely to participate if eligible. Second, residency patterns of the two family types may differ in ways that are correlated with TANF or FSP policies. For instance, married-parent families may tend to live in states with more stringent TANF and FSP policies than single-parent families. Third, even within the same state, state or federal program policies may differ for married- and single-parent families—for instance, in some states married-parent families may face stricter TANF work requirements than single-parent families. Alternatively, there may be differences in the way program policies are implemented by case workers for the two family types, even if these differences are not reflected in state or federal program rules. Finally, there may be unobservable differences across family types that are correlated with program eligibility and participation. In the case of program participation, these unobservable characteristics could include behavior differences such as sensitivity to stigma or

greater optimism about future employment prospects. Some or all of these factors may account for the observed differences in eligibility and participation rates across family types.[1]

In this chapter, we address three questions: (1) What factors are associated with differences in TANF eligibility rates between married- and single-parent families? (2) What factors are associated with differences in TANF participation rates between married- and single-parent families? and (3) What factors are associated with differences in FSP participation rates between married- and single-parent families?[2] For each question, we first present basic summary statistics for the full sample, and separately for single- and married-parent families, to examine differences in demographic characteristics between the two family types. We then attempt to identify the factors associated with program eligibility or participation through regression models that control for demographic, economic, and policy factors.[3] We then run these regression models separately for married- and single-parent families and use the results to formally decompose the differences in eligibility and participation rates across family types into: (1) differences due to observed characteristics, and (2) differences that are unexplained by these characteristics. The differences that are unexplained by observed characteristics may reflect differences in how state policies are implemented, how state policies and programs affect the two

[1] Our models allow us to explain, to a large extent, the effects of differences in state policies for the two family types, differences in observable characteristics that may vary across family type, and differences in residency patterns across family type. However, it is very difficult to capture the effects of the ways in which policies are implemented across states or other unobservable differences across family types that may be correlated with participation.

[2] We have not analyzed factors associated with FSP eligibility across family types, as FSP eligibility is determined at the federal level, and differences across family types are unlikely to be attributable to variation in program rules across states. Furthermore, we have used the program unit as the unit of analysis for our multivariate analysis. Thus, although we frequently refer to factors affecting "families'" decisions, we actually are referring to the unit's decisions. For the TANF program, the program unit and the family are the same. For FSP, the program unit refers to the household in most instances.

[3] We use unit-level sampling weights throughout the analysis. Results are substantively similar if we do not use sampling weights.

family types, or differences in unobserved characteristics that are correlated with program eligibility or participation. In the case of differences in program participation rates, these unobserved differences could include behavioral differences across family types.

It is fairly straightforward to identify the factors affecting TANF eligibility since TANF is a means tested program based on well-known eligibility criteria. The regression analysis of TANF eligibility by family type helps to identify how the relative importance of these factors differs between married- and single-parent families. The decomposition analysis shows, as one would expect, that nearly all of the differences in eligibility rates between married- and single-parent families can be explained by differences in observed characteristics, and it also identifies which factors tend to be most important in explaining the overall difference.

Identifying the factors affecting participation is less straightforward, given that participation reflects unique decision processes across families. The regression and decomposition analyses indicate that very little of the difference between married- and single-parent families can be explained by observed characteristics. Even among families with similar financial circumstances and demographic characteristics, married-parent families make considerably different participation decisions than single-parent families. We also find that specific program rules and state economic conditions, although related to program participation, do not explain much of the overall differences in participation rates between married- and single-parent families. As noted earlier, however, it is important to keep in mind that we are unable to capture the effects of state rules that may be different for single- and married-parent families, but that do not vary across states (such as the TANF work requirement rules).

A. TANF ELIGIBILITY

Married parents head just over half (53 percent) low-income families, while single parents head 40 percent (see Table III.1).[4] (The remaining seven percent of families are headed by cohabiters, discussed in Chapter IV). Even within the population of low-income families, there are some important differences in demographic characteristics and financial circumstances among married- and single-parent families that may affect TANF eligibility.

Not surprisingly, single-parent families are much more likely than married-parent ones to have only one adult in the unit (Table III.1). Married-parent families also have more children, on average, than do single-parent families. Low-income married-parent families are considerably more likely to be headed by a noncitizen than are low-income single-parent families, and they may therefore be more likely to face restrictions on TANF eligibility.

Even within the low-income population, married-parent families appear to be better off financially than single-parent families. In this analysis, in addition to examining monthly earnings of the unit, we also examine total unit income and additional *household* income over and beyond the unit's own income. The average monthly earnings of married-parent families are more than double those of single-parent families, as is the average monthly income, which includes earnings as well as unit income from other sources. Additional household income may or may not provide an important contribution to the economic well-being of families who live in households with other families, but it is unlikely to affect their TANF eligibility, as TANF rules typically would not take this additional household income into consideration.

Differences in state residency patterns could also account for differences in eligibility rates across family types. For instance, if married-parent families were more likely than single-parent

[4] These numbers differ slightly from those presented in Chapter II, as they are based on data from the March 2000 CPS rather than on the 2000 annual average, and they have been estimated at the TANF unit level rather than at the household level.

TABLE III.1

SUMMARY STATISTICS, SAMPLE OF ALL LOW-INCOME FAMILIES
(Percentages, Unless Otherwise Noted)

		Family Type	
	All[a]	Married-Parent	Single-Parent
Percentage of Families That Are:			
Married-parent	53	100	0
Single-parent	40	0	100
Citizenship Status of Unit Head			
Native U.S. citizen	77	66	87
Naturalized U.S. citizen	6	10	4
Noncitizen[b]	16	25	9
Number of Adults in Unit			
1	49	0	87
2	43	84	10
3	7	12	2
4 or more	2	3	0
(Average number of adults)	(1.6)	(2.2)	(1.1)
Number of Units in Household			
1	80	93	78
2 or more	20	7	22
(Average number of units per household)	(1.2)	(1.1)	(1.2)
Number of Children in Unit			
1 or 2	69	62	75
3 to 5	29	35	24
6 or more	2	3	1
(Average number of children)	(2.1)	(2.4)	(2.0)
Number of People in Unit			
2	21	0	37
3	28	21	33
4 or more	52	79	30
(Average unit size)	(3.7)	(4.6)	(3.1)
Number of Adult Earners in Unit			
None	30	14	43
1	57	60	55
2 or more	13	26	2
(Average number of earners)	(0.8)	(1.1)	(0.6)

TABLE III.1 (*continued*)

	All[a]	Family Type	
		Married-Parent	Single-Parent
Presence of Children, by Age Group (Years)			
Younger than 1	12	14	9
1 to 2	25	27	21
3 to 5	32	37	28
6 to 12	57	59	56
13 to 17	38	40	39
Monthly Earnings of Unit (Dollars)			
$ 0	29	14	42
$1 to $999	17	11	21
$1,000 to $1,999	32	35	29
$2,000 or more	23	40	8
(Average monthly earnings)	($1,158)	($1,668)	($735)
Monthly Income of Unit (Dollars)			
Less than $500	27	11	39
$500 to $1,499	28	22	34
$1,500 or more	45	67	27
(Average monthly income)	($1,325)	($1,834)	($917)
Household Income in Addition to Unit Income (Dollars)			
Less than $500	88	97	86
$500 to $1,499	6	2	6
$1500 or more	75	2	8
(Average additional household income)	($210)	($55)	($259)
Monthly Assets of Unit (Dollars)			
$0	79	73	85
$1 to $99	18	22	14
$100 or more	3	5	2
(Average value of monthly assets)	(10.4)	(18.3)	(4.6)
Unit Income Relative to Poverty Level (Percentage)			
Less than 100	48	32	60
100 to 129	15	16	13
130 to 149	10	13	8
150 to 184	18	25	12
185 to 200	8	12	6
Greater than 200	2	1	1
(Average unit income as a percentage of poverty level)	(100.5)	(121.8)	(77.4)

TABLE III.1 (*continued*)

	All[a]	Family Type	
		Married-Parent	Single-Parent
TANF Time Limit Policy in State of Residence[c]			
Lenient	31	33	29
Moderate	39	40	39
Strict	30	27	32
TANF Earnings Disregards in State of Residence[c]			
Low	31	32	30
Medium	21	20	21
High	49	48	49
Other TANF Policies in State of Residence			
State has diversion program	40	42	37
No restrictions on two-parent family eligibility	66	61	69
Sample Size	**6,647**	**3,505**	**2,661**

Source: Tabulations conducted by Mathematica Policy Research from the CPS, the Urban Institute's TRIM3 model, and welfare rules database.

[a]Includes cohabiting families.

[b]Noncitizens include both legal residents and undocumented aliens; undocumented aliens are not eligible for TANF or FSP, while requirements for noncitizens who are legal residents vary.

[c]Obtained from Blank and Schmidt (2001).

families to live in states with more stringent eligibility requirements, this could explain some of the difference in eligibility rates. This seems not to be the case, however, as there appears to be little variation in the state TANF policies for the two family types. This indicates that married- and single-parent families do not systematically locate in states with different types of TANF policies, and that differences in policies across states are therefore unlikely to be a major determinant of the differences in TANF eligibility rates between the two family types.[5]

TANF eligibility rules are related to a number of demographic factors, financial factors, and state policy variables. However, it is not immediately obvious how each of these factors affects the difference in eligibility rates between married- and single-parent families. In the following sections, we present results of linear probability models that attempt to identify the relative importance of family demographic characteristics, financial circumstances, family structure, and state program policies in determining TANF eligibility and in explaining differences in TANF eligibility rates between married- and single-parent families.

1. Linear Probability Model Results

TANF eligibility rates are complex functions of family income, assets, citizenship status, and other factors. In this section, rather than seeking to directly replicate state eligibility formulas, we present results of linear probability models that attempt to identify a broad set of factors correlated with TANF eligibility. The first model controls for family type and no other covariates; essentially, the coefficient on the single-parent indicator variable represents the raw difference in eligibility rates between single-parent families and married-parent families (the omitted group). The second model controls for demographic and financial characteristics likely to affect TANF eligibility, as well as for state fixed effects to account for any variation in state

[5] We are not able to capture the effects of policies that may vary for single- and married-parent families but that do not vary across states.

program rules or state economic conditions. The third model contains the demographic and financial covariates included in the second model, but it has controls for state policies relating to TANF eligibility and state economic conditions, rather than state fixed effects. We estimate this model to examine whether any of the policy measures are correlated with TANF eligibility.

As the first column of Table III.2 shows, among the low-income population, single-parent families are 28 percentage points more likely than married-parent families to be eligible for TANF.[6] As we would expect, much of this difference can be explained by differences in demographic and financial characteristics across the two family types. As column 2 on Table III.2 shows, after we control for factors likely to affect TANF eligibility, including income, earnings, assets, family size, citizenship, and fixed effects for state of residence, the difference in eligibility rates between married- and single-parent families falls to five percentage points, as the coefficient on the single-parent dummy variable indicates. Also as we might expect, the model that controls for state policies and economic conditions yields results similar to those from the model that controls for state fixed effects. The coefficient on the single-parent dummy variable in column 3 of Table III.2 is nearly identical to that in column 2.

2. Results by Family Type

As we have shown, after controlling for observed demographic, financial, and state characteristics, the residual difference in TANF participation rates between married- and single-parent families falls considerably, but a small, statistically significant difference remains. To explore possible explanations for the small residual difference between family types, we re-ran separately, for both family types, the model that controls for demographic and financial characteristics, state economic conditions, and state TANF policy variables (Table III.3). Since

[6] These numbers differ slightly from those presented in Chapter II, as they are based on data from the March 2000 CPS rather than on the 2000 annual average, and they have been estimated at the TANF unit level rather than at the household level.

TABLE III.2

ORDINARY LEAST SQUARES REGRESSIONS FOR TANF ELIGIBILITY, MARCH 2000

	Family Type Only (1)	Demographic and Economic Variables	
		State Dummies (2)	State Policy Indicators (3)
Constant	0.17**	0.38**	0.63**
Family Type			
Single-parent	0.28**	0.05**	0.06**
Noncitizen[a]		-0.05**	-0.05**
Number of People in Unit			
3		0.06**	0.05**
4		0.09**	0.09**
Two or More Units in Household		0.07**	0.06**
Number of Adult Earners in Unit			
1		-0.14**	-0.14**
2		-0.06*	-0.06*
Other Adults in Household		0.07**	0.08**
Age of Youngest Child in Unit			
Younger than 1		0.08**	0.08**
1 to 2		0.07**	0.07**
3 to 5		0.07**	0.07**
6 to 12		0.06**	0.06**
Monthly Unit Earnings ($1,000s)		0.15**	0.15**
Total Unit Income ($1,000s)		-0.37**	-0.37**
Additional Household Income		-0.00	-0.00
Unit Has Nonzero Assets		0.09**	0.09**
Unit's Income Relative to Poverty Level			
100 to 129 percent		-0.22**	-0.22**
130 to 149 percent		-0.18**	-0.19**
150 to 200 percent		-0.08**	-0.09**
TANF Earnings Disregards			
Moderate earnings disregards			-0.02
High earnings disregards			0.05**

TABLE III.2 (*continued*)

	Family Type Only (1)	Demographic and Economic Variables	
		State Dummies (2)	State Policy Indicators (3)
TANF Time Limit Policies			
Lenient			0.03
Moderate			-0.05**
TANF Diversion Program			0.03+
No Restrictions on TANF Benefits for Two-Parent Families			-0.02
State Unemployment Rate More than 6 Percent			0.09**
Gross Weekly Wages (Dollars)			
251 to 270			-0.04*
More than 270			0.04**
State Poverty Rates (Percentages)			
10 to 12.1			-0.02
More than 12.1			-0.01
Percentage Metropolitan			
72.4 to 84.8			-0.03+
More than 84.8			-0.09**
Region Dummies			
State Dummies			
R-Squared	0.09	0.54	0.53
Sample Size	**6,166**	**6,166**	**6,166**

Source: CPS, the Urban Institute's TRIM3 Microsimulation model, Blank and Schmidt (2001), welfare rules database, and state economic indicators from the Bureau of Labor Statistics.

[a]Noncitizens include both legal residents and undocumented aliens; undocumented aliens are not eligible for TANF or FSP, while requirements for noncitizens who are legal residents vary.

+ Significantly different from zero at the .10 level, two-tailed test.
* Significantly different from zero at the .05 level, two-tailed test.
** Significantly different from zero at the .01 level, two-tailed test.

TABLE III.3

ORDINARY LEAST SQUARES REGRESSIONS FOR TANF ELIGIBILITY, BY FAMILY TYPE

	(1) Married-Parent Families	(2) Single-Parent Families	(3) Difference Between Married and Single Coefficients
Constant	0.43**	0.86**	-0.43**
Noncitizen[a]	-0.03+	-0.07*	0.04
Four or More People in Unit	0.02	0.09**	-0.07*
Number of Adult Earners in Unit			
1	-0.05	-0.06+	0.01
2	-0.01	0.07	-0.08
Other Adults in Household	0.11**	0.07**	0.04
Age of Youngest Child in Household			
Younger than 1	0.07**	0.10**	-0.03
1 to 2	0.05**	0.08**	-0.02
3 to 5	0.05**	0.08**	-0.02
6 to 12	0.09**	0.05*	0.04
Monthly Unit Earnings ($1,000s)	0.08**	0.13**	-0.05
Total Unit Income ($1,000s)	-0.27**	-0.48**	0.22**
Additional Household Income	0.05*	-0.01	0.06*
Unit Has Nonzero Assets	0.10**	0.06*	0.04
Unit's Income Relative to Poverty Level			
100 to 130 percent	-0.16**	-0.24**	0.08+
130 to 150 percent	-0.15**	-0.16**	0.01
150 to 200 percent	-0.05+	-0.05	-0.00
TANF Earnings Disregards			
Moderate	-0.00	-0.04	0.03
High	0.07**	0.04	0.03
TANF Time Limit Policies			
Lenient	0.05	0.02	0.02
Moderate	-0.03	-0.06**	0.03
TANF Diversion Program	0.02	0.02	0.00
No Restrictions on Benefits to Two-Parent Families	-0.01	-0.02	0.01
State Unemployment Rate More than 6 Percent	0.15**	0.04	0.11+

TABLE III.3 *(continued)*

	(1) Married-Parent Families	(2) Single-Parent Families	(3) Difference Between Married and Single Coefficients
Gross Weekly Wages (Dollars)			
251 to 270	0.02	-0.08**	0.10**
More than 270	0.06**	0.03	0.03
State Poverty Rates (Percentage)			
10 to 12.1	-0.02	-0.04	0.02
Greater than 12.1	-0.03	-0.02	-0.01
Percentage Metropolitan			
72.4 to 84.8	-0.02	-0.05*	0.03
More than 84.8	-0.08**	-0.08**	-0.00
Region Dummies	Yes	Yes	Yes
R-Squared	0.37	0.58	
Sample Size	**3,505**	**2,661**	**6,166**

Source: CPS, the Urban Institute's TRIM3 Microsimulation model, Blank and Schmidt (2001), welfare rules database, and state economic indicators from the Bureau of Labor Statistics.

[a]Noncitizens include both legal residents and undocumented aliens; undocumented aliens are not eligible for TANF or FSP, while requirements for noncitizens who are legal residents vary.

+Significantly different from zero at the .10 level, two-tailed test.
*Significantly different from zero at the .05 level, two-tailed test.
**Significantly different from zero at the .01 level, two-tailed test.

program eligibility is not a direct choice of the family but is determined by state program policies, differences in coefficients across family types may partly reflect differences in how particular policies apply to different family types, or they may be driven by differences in unobserved variables that we are unable to include in our models, such as how programs are implemented in the field.

Columns 1 and 2 of Table III.3 present linear probability model results separately for married-parent and single-parent families, respectively. Column 3 presents the difference between the married-parent families' and single-parent families' coefficients. There are some significant differences in the regression coefficients between the two family types, and most of these differences are consistent with the possibility that state eligibility rules may apply somewhat differently for married- and single-parent families with similar household composition or income. All else equal, among married-parent families, larger families (four or more people) are not significantly more likely than smaller families to be eligible for TANF. Among single-parent families, however, the difference is larger and statistically significant, with larger families nine percentage points more likely to be eligible than smaller ones. There are also differences in the coefficients on total unit income and additional household income (or income from people in the household who are not part of the family unit). All else equal, eligibility rates of single-parent families are more negatively correlated with family income than are eligibility rates of married-parent families. Additional household income is positively correlated with TANF eligibility of married-parent families but is not significantly correlated with the eligibility of single-parent families. There are several other factors that are highly correlated with TANF eligibility—particularly age of youngest child, presence of other adults in the household, and central city residence—but because the correlation is high for both married and single-parent families, these factors explain little of the differences between the two family types.

3. Decomposition Results

To further explore the relative importance of each factor in explaining the difference in eligibility rates across family types, we used the regression results to formally decompose the overall difference in eligibility rates into its various components (Table III.4). This analysis indicates that essentially all of the difference in eligibility rates between married and single-parent families is due to differences in their financial situations—as noted earlier, even within the low-income population, married parent families tend to have higher levels of income and assets, which are negatively correlated with TANF eligiblity. Differences in demographic characteristics also explain a small portion of the difference. As we would expect from an appropriately specified model of a means-tested program with well-defined rules, differences in all observed characteristics combined fully explain the 28 percentage point difference in eligibility rates between married and single-parent families.

B. TANF PARTICIPATION

Identifying the factors associated with differences in TANF participation between married- and single-parent families is more difficult, because participation is based on a unique decision process within each family. Differences in program participation may reflect observed differences in family characteristics as well as differences in how those characteristics relate to participation outcomes, behavioral differences, and other unobserved differences across family types.

Single parents head the majority (57 percent) TANF-eligible families, while married parents head 29 percent (Table III.5). (Cohabiters, discussed in Chapter IV, head the remaining 13 percent.) This pattern is in contrast to the distribution of family types among the low-income population, in which married parents are the majority. In general, single-parent families eligible for TANF appear to be fairly different from eligible married-parent families. The heads of

TABLE III.4

DECOMPOSITION OF FACTORS RELATING TO TANF ELIGIBILITY

	Difference Between Married- and Single-Parent Families	
	Level	Percent
Raw Difference	-0.28	100.00
Difference Explained by Covariates	-0.28	100.10
Intercept	0.00	0.00
Demographic	-0.01	3.92
Household composition	0.08	-28.56
Financial	-0.35	127.25
Policy	0.00	-0.44
State's economic conditions	0.01	-2.07
Unexplained Difference	0.00	-0.10

Source: Computed from coefficients in Table III.3.

Note: The difference explained by covariates is computed as the difference between the average predicted eligibility rate of married-parent families if they had the coefficients of single-parent families and the average actual eligibility rate of single-parent families. The unexplained difference is the difference that would remain even if single-parent families had characteristics identical to those of married-parent families.

TABLE III.5

SUMMARY STATISTICS, ALL TANF-ELIGIBLE FAMILIES
(Percentages, Unless Otherwise Noted)

	All[a]	Family Type	
		Married-Parent	Single-Parent
Percentage of Families That Are:			
Married-parent	29	100	0
Single-parent	57	0	100
Age of Unit Head			
Younger than 25	29	10	33
25 to 34	34	34	34
35 to 44	26	35	24
45 or older	11	21	9
(Average age)	(32.01)	(36.74)	(31.07)
Race/Ethnicity of Unit Head			
Hispanic	25	34	22
White, non-Hispanic	41	48	37
Black, non-Hispanic	28	10	37
Other race, non-Hispanic	6	8	5
Educational Attainment of Unit Head			
Less than high school	38	41	38
High school diploma or GED	37	34	38
Some college	20	17	21
College or more	4	8	3
Citizenship Status of Unit Head			
Native U.S. citizen	82	64	87
Naturalized U.S. citizen	5	10	3
Noncitizen[b]	13	27	9
Central City Residence	13	10	13
Number of Adults in Unit			
1	70	1	88
2	23	82	8
3	5	13	2
4 or more	1	4	0
(Average number of adults)	(1.35)	(2.22)	(1.13)
Number of Units in Household			
1	60	88	63
2 or more	40	12	37
(Average number of units per household)	(1.45)	(1.14)	(1.42)

TABLE III.5 (*continued*)

	All[a]	Family Type: Married-Parent	Family Type: Single-Parent
Number of Children in Unit			
None	0	0	0
1 or 2	73	60	76
3 to 5	25	36	23
6 or more	2	4	1
(Average number of children)	(2.05)	(2.47)	(1.96)
Number of People in Unit			
2	32	0	40
3	30	22	31
4 or more	39	78	29
(Average unit size)	(3.41)	(4.69)	(3.09)
Number of Adult Earners in Unit			
None	62	35	70
1	33	49	29
2 or more	4	16	1
(Average number of earners)	(0.42)	(0.82)	(0.30)
Presence of Children, by Age Group (Years)			
Younger than 1	16	15	15
1 to 2	29	29	27
3 to 5	32	36	31
6 to 12	52	62	51
13 to 17	29	38	29
Monthly Earnings of Unit (Dollars)			
$0	62	35	69
$1 to $999	26	34	25
$1,000 to $1,999	8	20	4
$2,000 or more	4	11	2
(Average monthly earnings)	($362.41)	($760.10)	($243.70)
Monthly Income of Unit (Dollars)			
Less than $500	70	46	77
$500 to $1,499	23	35	20
$1,500 or more	7	19	3
(Average monthly income)	($438.14)	($823.29)	($328.87)
Household Income in Addition to Unit Income (Dollars)			
Less than $500	68	91	70
$500 to $1,499	8	2	6
$1,500 or more	25	7	24
(Average additional household income)	($1,029.39)	($266.19)	$1,057.26)

TABLE III.5 (*continued*)

	All[a]	Family Type: Married-Parent	Family Type: Single-Parent
Monthly Assets of Unit (Dollars)			
$0	91	88	92
$1 to $99	9	12	8
$100 or more	0	0	0
(Average value of monthly assets)	(1.38)	(1.77)	(1.77)
Unit Income Relative to Poverty Level (Percentage)			
Less than 100	92	83	95
100 to 129	4	8	3
130 to 149	1	2	1
150 to 184	1	3	1
185 to 200	0	0	0
Greater than 200	2	3	1
(Average unit income as a percentage of poverty level)	(61.8)	(78.2)	(28.4)
TANF Benefit Generosity in State of Residence			
Low	21	20	22
Medium	40	35	42
High	38	45	36
TANF Sanctioning Policy in State of Residence[c]			
Lenient	38	46	34
Moderate	25	23	25
Strict	37	31	41
TANF Time Limit Policy in State of Residence[c]			
Lenient	35	44	32
Moderate	36	34	36
Strict	29	23	32
Other TANF Policies in State of Residence			
State has diversion program	35	33	34
No restrictions on benefits to two-parent families	64	57	67
Sample Size	**2,481**	**729**	**1,406**

Source: Tabulations conducted by Mathematica Policy Research from the CPS, the Urban Institute's TRIM3 model, and welfare rules database.

[a]Includes cohabiting families.

[b]Noncitizens include both legal residents and undocumented aliens; undocumented aliens are not eligible for TANF or FSP, while requirements for noncitizens who are legal residents vary.

[c]Obtained from Blank and Schmidt (2001).

single-parent families tend to be younger than those of married-parent families. Married-parent family heads are considerably more likely than the heads of single-parent families to have completed college; however, the percentage that has completed college is fairly low (8 percent) relative to the U.S. population as a whole (23 percent, Bureau of the Census Website).

As we observed among low-income families, married-parent families eligible for TANF are much less likely than single-parent families to be headed by a U.S. citizen. Single-parent families are considerably more likely to have a black, non-Hispanic head than are married-parent families, which are much more likely to have white or Hispanic heads. Not surprisingly, among those eligible for TANF, married-parent families generally contain more adults than do single-parent families. Married-parent families also tend to have more children (an average of 2.47 children per family) than single-parent families (an average of 1.96 per family).

As in the low-income sample, TANF-eligible married-parent families are considerably better off financially than either single-parent or cohabiting families. On average, eligible married-parent families have monthly earnings of $760, compared with $244 for single-parent families. In addition, the total monthly income of eligible married-parent families is considerably higher than that of single-parent families.

1. Linear Probability Model Results

Similar to what we observed in Chapter II, eligible single-parent families are 16 percentage points more likely than married-parent families to participate in TANF (Table III.6, column 1). In contrast to the eligibility model, when we add controls for demographic factors and state fixed effects to the participation model, we see little change in the coefficient on the single-parent family indicator variable. Similarly, when we control for TANF policies and state economic conditions rather than state fixed effects, there is little change in the coefficient on the single-parent family indicator variable.

TABLE III.6

ORDINARY LEAST SQUARES REGRESSIONS FOR TANF PARTICIPATION

		Demographic and Economic Variables	
	Family Type Only (1)	State Dummies (2)	State Policy Indicators (3)
Constant	0.25**	-0.08	-0.05
Family Type			
Single-Parent	0.16**	0.19**	0.19**
Noncitizen[a]		-0.05	-0.05
Number of People in Unit			
3		0.07+	0.08*
4 or more		0.10*	0.12*
Two or More Units in Household		-0.26**	-0.25**
Number of Adult Earners in Unit			
1		-0.15**	-0.17**
2 or more		-0.19**	-0.23**
Other Adults in Household		0.04	0.04
Age of Youngest Child in Household (Years)			
Younger than 1		-0.01	-0.01
1 to 2		0.10**	0.10**
3 to 5		-0.03	-0.03
6 to 12		-0.02	-0.01
Race/Ethnicity			
Hispanic		0.02	0.00
Black, non-Hispanic		0.07+	0.04
Other		0.09	0.07
Age of Unit Head			
Younger than 25		0.00	0.01
25 to 34		0.06	0.05
35 to 44		-0.03	-0.03
Education of Unit Head			
Less than high school		0.25**	0.24**
High school diploma or GED		0.21**	0.20**
Some college		0.17**	0.15*
Central City Residence		0.06	0.07+
Amount of TANF Benefits Eligible for ($1,000s)		0.19*	0.14
Eligible for FSP		0.04	0.04
Monthly Unit Earnings ($1,000s)		0.05	0.05
Total Unit Income ($1,000s)		-0.07	-0.07

TABLE III.6 *(continued)*

		Demographic and Economic Variables	
	Family Type Only (1)	State Dummies (2)	State Policy Indicators (3)
Additional Household Income		-0.01+	-0.01*
Unit Has Nonzero Assets		0.08+	0.09*
Unit's Income Relative to Poverty Level			
100 to 129 percent		0.06	0.05
130 to 149 percent		-0.19*	-0.21**
150 to 200 percent		0.04	0.03
TANF Sanctions Rating			
Lenient			0.01
Moderate			-0.00
TANF Time Limit Policies			
Lenient			-0.07
Moderate			-0.04
TANF Diversion Program			-0.02
No Restrictions on TANF Benefits for Two-Parent Families			-0.05
State Unemployment Rate More than 6 Percent			0.13+
Gross Weekly Wages (in Dollars)			
251 to 270			-0.01
More than 270			0.04
State Poverty Rates (Percentages)			
10 to 12.1			0.05
More than 12.1			0.13**
Percentage Metropolitan			
72.4 to 84.8			-0.04
More than 84.8			-0.06
Region Dummies			Yes
State Dummies		Yes	
R-Squared	0.02	0.24	0.22
Sample Size	**2,135**	**2,135**	**2,135**

Source: CPS, the Urban Institute's TRIM3 microsimulation model, Blank and Schmidt (2001), welfare rules database, and state economic indicators from the Bureau of Labor Statistics.

[a]Noncitizens include both legal residents and undocumented aliens; undocumented aliens are not eligible for TANF or FSP, while requirements for noncitizens who are legal residents vary.

+ Significantly different from zero at the .10 level, two-tailed test.
* Significantly different from zero at the .05 level, two-tailed test.
** Significantly different from zero at the .01 level, two-tailed test.

A variety of demographic and financial factors appear to be correlated with TANF participation—as one might expect, families with higher education, more earners, higher income, or other income sources in the household are less likely to participate. However, these factors account for little of the difference between married and single-parent families. Overall, state TANF policy variables included in the model are not very predictive of TANF participation.[7] Taken together, these results suggest that the difference in TANF participation rates across the two family types is not simply a function of differences in observed family characteristics and that TANF participation decisions made by married-parent families may be fundamentally different from the decisions made by single-parent families. Differences in participation rates may also be driven by other state policy variables that differ across family types, but that do not vary across sates, such as the TANF work requirements rules.

2. Results by Family Type

As we have shown, even after controlling for demographic, financial, and state characteristics, residual differences in TANF participation rates persist between married- and single-parent families. Some of the remaining differences may reflect behavioral differences across family types. For example, married-parent families might be less likely to participate in TANF than demographically similar single-parent families because the married parents expect to find jobs more quickly, may be more sensitive to the stigma they believe is associated with collecting TANF benefits, or may not know they are eligible for benefits. To explore possible behavioral differences across these two family types, we re-ran separately, for both family types, the model that controls for demographic characteristics, state economic conditions, and state

[7] The amount of TANF benefits for which a family is eligible is a function both of the family's financial circumstances and of state TANF policies and is predictive of TANF participation. When we decompose the factors related to TANF participation, we classify the benefit amount for which the family is eligible as a policy variable, rather than as a demographic variable.

TANF policy variables (Table III.7). Differences in coefficients across family types may partly reflect behavioral differences among family types in response to financial circumstances or state TANF policies. In addition, differences in the policy coefficients may reflect differences in how particular policies apply to different family types. Finally, differences in coefficients may also be driven in part by differences in unobserved variables that are unable to include in our models.

Columns 1 and 2 of Table III.7 present linear probability model results separately for married-parent and single-parent families, respectively. Column 3 presents the difference between the married-parent families' and single-parent families' coefficients. Since one might expect behavioral differences between married- and single-parent families to be reflected in differences in these regression coefficients, it is notable that there are few significant differences in the coefficients across the family types. An exception is the coefficient on FSP eligibility, which differs considerably between married-parent families and single-parent ones. All else equal, married-parent families eligible for FSP are less likely to participate in TANF than those who are not eligible (although this difference is not statistically significant), and single-parent families eligible for FSP are more likely to participate in TANF than those who are not eligible. The number of earners in the family and the education of the family head are important predictors of participation for both married and single-parent families, but do little to explain the difference between the two.

3. Decomposition Results

Given that married-parent families participate in TANF at considerably lower rates than single-parent families, policymakers may want to know the extent to which this difference simply reflects differences in basic characteristics, and the extent to which it may reflect fundamental differences in the way that married and single-parent families make participation decisions. As we saw from the regression results in Table III.6, we can see more formally from

TABLE III.7

ORDINARY LEAST SQUARES REGRESSIONS FOR TANF PARTICIPATION, BY FAMILY TYPE

	(1) Married-Parent Families	(2) Single-Parent Families	(3) Difference Between Married and Single Coefficients
Constant	0.25	0.14	0.12
Noncitizen[a]	-0.00	-0.04	0.04
Four or More People in Unit	0.05	0.05	-0.00
Number of Adult Earners in Unit			
1	-0.16*	-0.14**	-0.02
2	-0.20*	0.04	-0.24
Other Adults in Household	0.07	0.03	0.04
Age of Youngest Child in Household			
Younger than 1	-0.01	0.03	-0.04
1 to 2	0.07	0.16**	-0.08
3 to 5	0.02	0.01	0.01
6 to 12	0.10+	0.01	0.09
Race/Ethnicity			
Hispanic	-0.06	0.01	-0.08
Black, non-Hispanic	0.19+	0.04	0.16
Other	0.01	0.09	-0.08
Age of Family Head			
Younger than 25	0.07	-0.08	0.15
25 to 34	-0.01	0.06	-0.06
35 to 44	-0.12+	-0.01	-0.11
Education of Family Head			
Less than high school	0.18*	0.25**	-0.07
High school diploma or GED	0.25**	0.19*	0.06
Some college	0.25**	0.15+	0.10
Central City Residence	0.02	0.09+	-0.07
Amount of TANF Benefits Eligible for ($1,000s)	0.04	0.19+	-0.15
Eligible for FSP	-0.14	0.14**	-0.28**
Monthly Unit Earnings ($1,000s)	-0.11	0.01	-0.11
Total Unit Income ($1,000s)	0.05	-0.02	0.08
Additional Household Income	-0.06**	-0.03**	-0.02
Unit Has Nonzero Assets	0.14*	0.07	0.07

TABLE III.7 *(continued)*

	(1) Married-Parent Families	(2) Single-Parent Families	(3) Difference Between Married and Single Coefficients
Unit's Income Relative to Poverty Level			
100 to 129 percent	-0.06	0.13	-0.19
130 to 149 percent	-0.27**	-0.16	-0.11
150 to 200 percent	-0.03	0.05	-0.08
TANF Benefit Generosity			
Medium	-0.21	-0.13	-0.08
High	-0.25	-0.16	-0.10
TANF Sanctions Rating			
Lenient	-0.02	0.04	-0.06
Moderate	-0.14	-0.01	-0.13
TANF Time Limit Policies			
Lenient	0.01	-0.08	0.09
Moderate	0.01	-0.03	0.04
TANF Diversion Program	0.11	-0.04	0.15
No Restrictions on Benefits to Two-Parent Families	-0.15	-0.02	-0.13
State Unemployment Rate More than 6 Percent	0.17	0.24*	-0.07
Gross Weekly Wages (Dollars)			
251 to 270	0.07	-0.04	0.11
More than 270	0.05	-0.01	0.07
State Poverty Rates (Percentage)			
10 to 12.1	0.14	0.00	0.14
Greater than 12.1	0.12	0.05	0.07
Percentage Metropolitan			
72.4 to 84.8	-0.04	-0.01	-0.02
More than 84.8	-0.04	0.03	-0.08
Region Dummies	Yes	Yes	Yes
R-Squared	0.24	0.18	
Sample Size	**729**	**1,406**	**2,135**

Source: CPS, the Urban Institute's TRIM3 Microsimulation model, Blank and Schmidt (2001), welfare rules database, and state economic indicators from the Bureau of Labor Statistics.

[a]Noncitizens include both legal residents and undocumented aliens; undocumented aliens are not eligible for TANF or FSP, while requirements for noncitizens who are legal residents vary.

+ Significantly different from zero at the .10 level, two-tailed test.
* Significantly different from zero at the .05 level, two-tailed test.
** Significantly different from zero at the .01 level, two-tailed test.

the decomposition results that none of the difference in participation rates across the family types can be explained by differences in family or state characteristics. In fact, Table III.8 indicates that if married- and single-parent families had more similar financial characteristics and household composition, the difference in participation rates would be even greater. Taken together, these results suggest that differences in TANF participation rates across the two family types are likely due to different behavioral responses of the two family types or to differences in other unobserved characteristics of the two groups, rather than due to differences in observed characteristics of the two groups.

C. FSP PARTICIPATION

Single parents head 47 percent of families eligible for FSP, and married parents head 44 percent (cohabiters head the remaining 9 percent) (Table III.9). It is interesting that this distribution differs somewhat from the distribution of families eligible for TANF; among that population, nearly 60 percent of families are headed by single parents, and only 29 percent are headed by married parents.[8]

As in the population of TANF-eligible families, FSP-eligible single-parent families are fairly different from eligible married-parent families. In general, the heads of married-parent families are older than those of single-parent families, and they are somewhat more likely to have completed college. The heads of married-parent families are considerably more likely to be white or Hispanic than the heads of single-parent families, who are more likely to be black.

As in the TANF eligibility and participation samples, the heads of married-parent families that are eligible for FSP are considerably less likely to be U.S. citizens than are the heads of

[8] These differences may be due to differences in the distribution of characteristics across family types. For example, in most states, the TANF program generally has a lower income cutoff for eligibility relative to FSP's cutoff, and single-parent families are somewhat more likely than married-parent families to have lower incomes. In addition, FSP program rules apply universally to all families regardless of family type; in contrast, some state TANF rules may be more restrictive for married-parent families than for single-parent ones.

TABLE III.8

DECOMPOSITION OF FACTORS RELATING TO TANF PARTICIPATION

	Difference Between Married- and Single-Parent Families	
	Level	Percent
Raw Difference	-0.16	100.00
Difference Explained by Covariates	0.03	-17.49
Intercept	0.00	0.00
Demographic	-0.01	6.68
Household composition	0.01	-7.49
Financial	0.02	-13.66
Policy	0.00	0.63
State's economic conditions	0.01	-3.65
Unexplained Difference	-0.19	117.49

Source: Computed from coefficients in Table III.7.

Note: The difference explained by covariates is computed as the difference between the average predicted participation rate of married-parent families if they had the coefficients of single-parent families and the average actual participation rate of single-parent families. The unexplained difference is the difference that would remain even if single-parent families had characteristics identical to those of married-parent families.

TABLE III.9

SUMMARY STATISTICS, ALL FSP-ELIGIBLE FAMILIES
(Percentages, Unless Otherwise Noted)

		Family Type	
	All[a]	Married-Parent	Single-Parent
Percentage of Families That Are:			
Married-parent	44	100	0
Single-parent	47	0	100
Age of Unit Head			
Younger than 25	23	12	26
25 to 34	33	34	33
35 to 44	30	36	28
45 or older	14	18	13
(Average age)	(33.73)	(36.08)	(33.11)
Race/Ethnicity of Unit Head			
Hispanic	29	42	21
White, non-Hispanic	40	42	37
Black, non-Hispanic	26	9	38
Other race, non-Hispanic	5	7	4
Educational Attainment of Unit Head			
Less than high school	39	44	37
High school diploma or GED	37	33	38
Some college	20	17	21
College or more	5	6	4
Citizenship Status of Unit Head			
Native U.S. citizen	77	57	87
Naturalized U.S. citizen	5	10	3
Noncitizen[b]	18	32	9
Central City Residence	12	11	13
Number of Adults in Unit			
1	56	1	87
2	36	83	9
3	6	11	3
4 or more	2	5	1
(Average number of adults)	(1.53)	(2.20)	(1.16)
Number of Units in Household			
1	74	93	76
2 or more	26	7	24
(Average number of units per household)	(1.26)	(1.07)	(1.27)

TABLE III.9 (*continued*)

	All[a]	Family Type	
		Married-Parent	Single-Parent
Number of Children in Unit			
None	2	1	2
1 or 2	68	57	72
3 to 5	29	37	25
6 or more	2	5	1
(Average number of children)	(2.13)	(2.51)	(1.96)
Number of People in Unit			
2	24	0	36
3	26	20	30
4 or more	48	79	31
(Average unit size)	(3.66)	(4.72)	(3.12)
Number of Adult Earners in Unit			
None	43	23	55
1	49	58	44
2 or more	8	19	2
(Average number of earners)	(0.65)	(0.96)	(0.47)
Presence of Children, by Age Group (Years)			
Younger than 1	14	17	12
1 to 2	27	30	23
3 to 5	32	37	28
6 to 12	55	60	54
13 to 17	34	40	33
Monthly Earnings of Unit (Dollars)			
$0	42	23	53
$1 to $999	24	18	27
$1,000 to $1,999	27	42	19
$2,000 or more	7	18	2
(Average monthly earnings)	(708.91)	(1,172.61)	(452.22)
Monthly Income of Unit (Dollars)			
Less than $500	42	21	53
$500 to $1,499	38	38	39
$1,500 or more	20	40	8
(Average income)	(833.31)	(1,296.54)	(584.29)
Additional Household Income in Addition to Unit Income (Dollars)			
Less than $500	84	96	83
$500 to $1,499	4	1	4
$1,500 or more	12	3	13
(Average additional household income)	(495.81)	(118.44)	(569.66)

TABLE III.9 (*continued*)

	All[a]	Family Type: Married-Parent	Family Type: Single-Parent
Monthly Assets of Unit (Dollars)			
$0	90	88	91
$1 to $99	10	12	9
$100 or more	0	0	0
(Average value of monthly assets)	(0.34)	(0.55)	(0.21)
Unit Income Relative to Poverty Level (Percentage)			
Less than 100	74	60	82
100 to 129	19	27	15
130 to 149	3	5	2
150 to 184	2	5	1
185 to 200	0	0	0
Greater than 200	1	3	0
(Average unit income as a percentage of poverty level)	(72.1)	(95.9)	(50.3)
Amount of FSP Benefits Eligible for (Dollars)	205	208	208
State Has Electronic Benefit Transfer System	38	40	37
FSP Recertification Requirements in State of Residence			
Required to report less frequently than monthly	71	67	74
Require to report changes in income	3	2	3
Monthly reporting required	26	30	23
(Average months to recertification for units with children)	(7.96)	(8.09)	(7.90)
FSP Sanctioning Policies in State of Residence			
Partial sanctions only	65	65	64
Full sanctions imposed	35	35	36
Sample Size	**3,966**	**1,734**	**1,843**

Source: CPS, the Urban Institute's TRIM3 Microsimulation model, Blank and Schmidt (2001), welfare rules database, and state economic indicators from the Bureau of Labor Statistics.

[a]Includes cohabiting families.

[b]Noncitizens include both legal residents and undocumented aliens; undocumented aliens are not eligible for TANF or FSP, while requirements for noncitizens who are legal residents vary.

\+ Significantly different from zero at the .10 level, two-tailed test.
* Significantly different from zero at the .05 level, two-tailed test.
** Significantly different from zero at the .01 level, two-tailed test.

single-parent families. Compared with single-parent families, married-parent families generally have more adults and more children in the unit. Furthermore, FSP-eligible married-parent families appear to be better off financially than single-parent ones. Their monthly earnings and income are more than double those of single-parent families.

1. Linear Probability Model Results

Eligible single-parent families are about 23 percentage points more likely than eligible married-parent families to participate in FSP; this difference is statistically significant (Table III.10).[9] After we add controls for demographic characteristics and for state fixed effects, the difference between single-parent family and married-parent family participation rates falls to 17 percentage points. This suggests that at least part of the gap in FSP participation between married and single-parent families may be due to differences in these family characteristics. The coefficients on these factors are generally as expected—poverty is positively correlated with participation, while higher education levels, lack of citizenship, and additional household income are negatively correlated with participation.

Although FSP rules are determined primarily at the federal level, FSP policies vary somewhat across states. We also know from other analyses that participation rates in FSP vary significantly across states (Cunnyngham 2004), and we assume that such variation is also reflected in differential participation rates across states by married- and single-parent families. Interestingly, the state FSP policies that we included in the model do not seem to have a strong impact on the decision of families to participate in the program. The policy variables that we examined were the states' average FSP recertification period (in months) for families with children and dummy variables for whether the states have an electronic benefit transfer

[9] Differences from the raw numbers presented in Chapter II may be a result of differences in the eligible sample due to the different models used, the different units of analysis, and the fact that we are using actual participation rates from CPS data, as opposed to predicted participation.

TABLE III.10

ORDINARY LEAST SQUARES REGRESSIONS FOR FSP PARTICIPATION

		Demographic and Economic Variables	
	Family Type Only (1)	State Dummies (2)	State Policy Indicators (3)
Constant	0.27**	0.14	-0.13
Family Type			
Single-parent	0.23**	0.17**	0.18**
Noncitizen[a]		-0.10**	-0.11**
Number of People in Unit			
3		0.07*	0.07*
4 or more		0.10*	0.11**
Two or More Units in Household		-0.08*	-0.07*
Number of Adult Earners in Unit			
1		-0.06+	-0.06*
2 or more		-0.07	-0.08+
Other Adults in Household		-0.03	-0.04
Age of Youngest Child in Household (Years)			
Younger than 1		-0.02	-0.02
1 to 2		0.06*	0.06*
3 to 5		0.03	0.03
6 to 12		0.02	0.02
Race/Ethnicity			
Hispanic		-0.01	-0.01
Black, non-Hispanic		0.09**	0.08**
Other		0.09+	0.09+
Age of Unit Head			
Younger than 25		0.05	0.06
25 to 34		0.10**	0.10**
35 to 44		0.03	0.03
Education of Unit Head			
Less than high school		0.28**	0.28**
High school diploma or GED		0.18**	0.18**
Some college		0.14**	0.14**
Central City Residence		0.01	0.02
Amount of FSP Benefits Eligible for ($1,000s)		0.04	0.02
Eligible for TANF		0.05+	0.04
Monthly Unit Earnings ($1,000s)		-0.07	-0.06
Total Unit Income ($1,000s)		0.02	0.01

TABLE III.10 *(continued)*

		Demographic and Economic Variables	
	Family Type Only (1)	State Dummies (2)	State Policy Indicators (3)
Additional Household Income		-0.05**	-0.05**
Unit has Nonzero Assets		0.12**	0.12**
Unit's Income Relative to Poverty Level			
100 to 129 percent		-0.08*	-0.08**
130 to 149 percent		-0.13*	-0.14**
150 to 200 percent		-0.18**	-0.17**
State Has Electronic Benefit Transfer System			0.05
FSP Average Recertification Period for Families with Children			0.01
Required to Report Changes in Income			0.02
Monthly Reporting Required			-0.03
Full FSP Sanctions Imposed			0.01
State Unemployment Rate More than 6 Percent			0.11+
Gross Weekly Wages (Dollars)			
251 to 270			-0.02
More than 270			-0.03
State Poverty Rates (Percentages)			
10 to 12.1			0.00
More than 12.1			0.10**
Percentage of Metropolitan			
72.4 to 84.8			-0.00
More than 84.8			-0.02
Region Dummies			Yes
State Dummies		Yes	
R-squared	0.05	0.23	0.22
Sample Size	**3,577**	**3,577**	**3,577**

Source: CPS, the Urban Institute's TRIM3 Microsimulation model, Blank and Schmidt (2001), welfare rules database, and state economic indicators from the Bureau of Labor Statistics.

[a]Noncitizens include both legal residents and undocumented aliens; undocumented aliens are not eligible for TANF or FSP, while requirements for noncitizens who are legal residents vary.

+ Significantly different from zero at the .10 level, two-tailed test.
* Significantly different from zero at the .05 level, two-tailed test.
** Significantly different from zero at the .01 level, two-tailed test.

program, the stringency of income reporting requirements (less than monthly, monthly, or a requirement to report only changes in income), and the stringency of the states' FSP sanctions (full or partial). As shown in column 3 of Table III.10, the coefficients on each of these policy variables is small and statistically insignificant. Although we cannot attach a causal interpretation to these findings, they are at least suggestive that these variations in state FSP policies are not the factors that affect the families' decisions to participate in the program. Given differences in participation rates across states, there may be other, as yet unidentified state policies or practices that may vary across family types that do affect decisions about participation in FSP.

2. Results by Family Type

In Table III.11, we re-ran separately, for both married- and single-parent families, the model that controls for demographic characteristics, state economic conditions, and state FSP policy variables. As we have discussed, differences in coefficients across family types may partly reflect behavioral differences among family types in response to financial circumstances or state FSP policies. Differences in the policy coefficients may reflect differences in the way that particular policies apply to different family types. Finally, differences in coefficients also may be driven in part by omitted variables for which we are unable to control in our models.

Columns 1 and 2 of Table III.11 present linear probability model results separately for married- and single-parent families, respectively. Column 3 presents the difference between the married-parent families' and single-parent families' coefficients. Single-parent families headed by noncitizens are significantly less likely to participate in FSP than are their counterparts headed by citizens. Among married-parent families, however, the difference in participation rates between those headed by citizens and those headed by noncitizens is not statistically significant. There also appear to be differences among family types in the relationship between the education level of the unit head and the families' participation decisions. Single-parent

TABLE III.11

ORDINARY LEAST SQUARES REGRESSIONS FOR FSP PARTICIPATION, BY FAMILY TYPE

	(1) Married-Parent Families	(2) Single-Parent Families	(3) Difference Between Married and Single Coefficients
Constant	0.09	-0.10	0.19
Noncitizen[a]	-0.01	-0.16**	0.15*
Four or More People in Unit	0.03	0.05	-0.02
Number of Adult Earners in Unit			
1	-0.07	-0.03	-0.04
2	-0.09	-0.04	-0.05
Other Adults in Household	-0.03	-0.01	-0.01
Age of Youngest Child in Household			
Younger than 1	0.01	-0.03	0.04
1 to 2	0.05	0.09**	-0.04
3 to 5	0.04	0.05	-0.01
6 to 12	0.05	0.05	0.00
Race/Ethnicity			
Hispanic	-0.08+	0.03	-0.10+
Black, non-Hispanic	0.12	0.07*	0.05
Other	0.05	0.11+	-0.06
Age of Family Head			
Younger than 25	0.08	0.05	0.03
25 to 34	0.06	0.16**	-0.11
35 to 44	-0.03	0.08+	-0.11+
Education of Family Head			
Less than high school	0.14*	0.38**	-0.25**
High school diploma or GED	0.09	0.25**	-0.16+
Some college	0.03	0.23**	-0.19*
Central City Residence	-0.03	0.03	-0.05
Amount of FSP Benefits Eligible for ($1,000s)	0.34*	-0.08	0.42*
Eligible for TANF	-0.02	0.06+	-0.08
Monthly Unit Earnings ($1,000s)	-0.16**	-0.01	-0.16*
Total Unit Income ($1,000s)	0.11*	-0.03	0.15+

TABLE III.11 *(continued)*

	(1) Married-Parent Families	(2) Single-Parent Families	(3) Difference Between Married and Single Coefficients
Additional Household Income	-0.04**	-0.06**	0.02
Unit Has Nonzero Assets	0.13**	0.13**	0.00
Unit's Income Relative to Poverty Level			
100 to 129 percent	0.00	-0.14**	0.14*
130 to 149 percent	-0.06	-0.20*	0.14
150 to 200 percent	-0.09**	-0.32**	0.23**
State Has Electronic Benefit Transfer System	0.03	0.06	-0.03
FSP Average Recertification Period for Families with Children	-0.00	0.01*	-0.02
Required to Report Changes in Income	-0.12	0.01	-0.13
Monthly Reporting Required	-0.09	-0.03	-0.06
Full FSP Sanctions Imposed	-0.07	0.04	-0.11
State Unemployment Rate More than 6 Percent	0.04	0.12+	-0.08
Gross Weekly Wages (Dollars)			
251 to 270	-0.10+	0.00	-0.10
More than 270	-0.03	-0.04	0.00
State Poverty Rates (Percentages)			
10 to 12.1	-0.01	-0.01	0.01
More than 12.1	0.14*	0.06	0.08
Percentage of Metropolitan			
72.4 to 84.8	-0.01	0.01	-0.02
More than 84.8	-0.06	0.02	-0.07
Region Dummies	Yes	Yes	Yes
R-Squared	0.18	0.20	
Sample Size	**1,734**	**1,843**	

Source: CPS, the Urban Institute's TRIM3 Microsimulation model, Blank and Schmidt (2001), welfare rules database, and state economic indicators from the Bureau of Labor Statistics.

[a]Noncitizens include both legal residents and undocumented aliens; undocumented aliens are not eligible for TANF or FSP, while requirements for noncitizens who are legal residents vary.

\+ Significantly different from zero at the .10 level, two-tailed test.
* Significantly different from zero at the .05 level, two-tailed test.
** Significantly different from zero at the .01 level, two-tailed test.

families whose heads are not college graduates are significantly more likely to participate than are their counterparts whose heads are college graduates. In contrast, among married-parent families, the differences across education groups are considerably less pronounced. Income relative to the poverty threshold is a significant predictor of participation rates among single-parent families but is less important as a predictor among married-parent families.

3. Decomposition Results

Table III.12 decomposes the raw differences in FSP participation rates between married- and single-parent families into the portion explained by characteristics (demographic, financial, state policies, and state economic conditions) and the portion that is unexplained by observed characteristics which suggest there may be fundamental differences in how the two family types make their participation decisions. The decomposition indicates that differences in the covariates explain some, but not all, of the raw difference in FSP participation rates between single-parent and married-parent families. If single-parent families had the same observed characteristics as married-parent families, our model would predict that the gap in participation rates between the two groups would fall by 9 percentage points, or 37 percent of the raw 23 percentage point difference we observe in the data. The remaining 63 percent difference is unexplained by observed characteristics and may reflect behavioral differences across the two family types or other unobserved characteristics.

The decomposition further indicates that demographic characteristics and financial circumstances are the most important determinants of the differential FSP participation rates across these two family types. As shown in Table III.9, the heads of single-parent families tend to be younger and less educated, and are more likely to be black, non-Hispanic than the heads of married-parent families, and these characteristics are all associated with higher FSP participation according to the regression results in Tables III.10 and III.11. Married-parent families are also

TABLE III.12

DECOMPOSITION OF FACTORS RELATING TO FSP PARTICIPATION

	Difference Between Married- and Single-Parent Families	
	Level	Percent
Raw Difference	-0.23	100.00
Difference Explained by Covariates	-0.09	36.61
Intercept	0.00	0.00
Demographic	-0.07	30.49
Household composition	0.02	-10.45
Financial	-0.04	16.56
Policy	0.00	0.70
State's economic conditions	0.00	-0.70
Unexplained Difference	-0.15	63.39

Source: Computed from coefficients in Table III.11.

Note: The difference explained by covariates is computed as the difference between the average predicted participation rate of married-parent families if they had the coefficients of single-parent families and the average actual participation rate of single-parent families. The unexplained difference is the difference that would remain even if single-parent families had characteristics identical to those of married-parent families

better off financially than single-parent families, with dramatically higher average income and assets, both of which tend to be negatively correlated with FSP participation. Almost none of the raw difference is explained by differences in household composition, observed FSP policies that vary across states, or the state economic conditions that these two family types face.

D. CONCLUSIONS

Overall, differences in financial situations appear to be one of the most important factors in explaining the difference in TANF eligibility rates between low-income married- and single-parent families. Differences in demographic characteristics also explain some of the difference. As one would expect, differences in observed family and state characteristics together can account for all of the difference in eligibility rates across family types.

In contrast, little of the differences in participation rates across family types can be explained by differences in observed characteristics. This is likely because participation is not determined by state formulas, but rather by a unique decision process within each family. None of the difference in TANF participation rates across family types can be explained by differences in observed demographic characteristics, financial situations, or state policies that vary across states.[10] Only about 37 percent of the difference in FSP participation rates between family types can be explained by differences in these factors. These findings suggest that some of the differences in program participation rates between married- and single-parent families may thus be due to differing behavioral responses of single-parent and married-parent families or differences in other unobserved characteristics. It is also possible that unobserved state practices

[10] As noted earlier, we are not able to capture the effects of state policies that do not vary across states but that may be different for single- and married-parent families and may affect their participation rates, such as the TANF work requirement rule.

or attitudes or rules that we are unable to include in our models may affect married-parent families' willingness to participate in TANF and FSP.

Given the large differences in TANF and FSP participation rates between married- and single-parent families, it would be useful to further explore potential explanations for these differences. For example, it would be valuable to understand the relative importance of such factors as stigma and families' failure to realize that they are eligible compared with factors that reflect the families' optimism about their future income or employment prospects. To learn more about this subject, it may be useful to conduct interviews or focus groups with small numbers of eligible married-parent families to learn why they do not participate in TANF and FSP. Interviews with local program staff may also provide insight into the program context for the participation decisions of married and single parent families.

IV. PROGRAM ELIGIBILITY AND PARTICIPATION OF COHABITING HOUSEHOLDS

The previous chapters focused on the program eligibility and participation rates of married-parent households relative to those of single-parent households. A third group of households not included in our previous analyses are cohabiting households, or those headed by a single parent living with an unmarried partner. The economic circumstances and decision-making processes of cohabiting households may be quite different from both married- or single-parent households. Therefore, in an analysis of program eligibility and participation decisions, it is important to treat them as a distinct group.

While cohabiting households may be of considerable interest to policymakers, several factors complicate analysis of the eligibility and participation decisions of these households. The first difficulty is identifying these households in the CPS. In some cases, the relationship of the unmarried parent to other adults living in the household is explicit. In other cases, however, it must be inferred from the available data, through a procedure described in greater detail below. The second difficulty is that cohabiting households are far fewer in number than married- or single-parent households, and CPS sample sizes for these households are therefore quite small. This makes it difficult to obtain precise estimates of program eligibility and participation for demographic or economic subgroups of cohabiting households. Finally, there is considerable variation in how state TANF and FSP policies apply to cohabiting families, and information on state policies regarding cohabiting families is not always readily available. It may therefore be difficult to estimate the effects of particular policies on the eligibility or participation of cohabiting households.

In this chapter, we provide a basic overview of the TANF and FSP eligibility and participation rates of cohabiting households relative to those of married- and single-parent households. First, we discuss our process for identifying cohabiting households in the CPS. We then provide descriptive statistics on cohabiting households and compare them to those for married- and single-parent households. We then provide basic statistics on the TANF and FSP eligibility and participation rates of cohabiting households relative to those headed by single and married households. We next discuss trends in these rates. We conclude by discussing directions for future research on the program eligibility and participation decisions of cohabiting families relative to those of married- and single-parent families.

A. IDENTIFYING COHABITING HOUSEHOLDS IN THE CPS DATA

A primary challenge in studying program eligibility and participation of cohabiting households is identifying these households in the CPS. The CPS contains detailed information about family relationships for all *related* individuals in a household (such as spouses, parents, children, and siblings). For *unrelated* individuals (such as partners and roommates), however, the CPS provides relationship information only for the household reference person. Therefore, if a child's single mother lives with her unmarried partner, and either she or her partner is the household reference person, the relationship between mother and partner will be directly observed in the data. If, however, neither the child's mother nor her partner is the household reference person, their relationship as partners will not be directly observable in the data and will need to be inferred from available information.

We tested various approaches to identifying cohabiting couples with children in households in which the unmarried parent was neither the reference person nor the partner of the reference person. To determine whether an unmarried parent might have a partner, we looked at all unmarried, unrelated individuals in the household of the opposite sex whose ages were within a

certain number of years of the parent's age.[1] After some exploration, we decided to identify a parent as cohabiting if there was an unmarried, unrelated individual of the opposite sex of the parent in the household whose age was within 10 years of the parent's age. Given this definition, any family with a child and his or her parent present that was not classified as a married-parent or cohabiting family was classified as a single-parent family. Of the households we classified as cohabiting, the cohabiting status of 91 percent was determined directly from the CPS, and the status of the remaining 9 percent was determined according to the algorithm described above.

B. DESCRIPTIVE STATISTICS FOR COHABITING, MARRIED-PARENT, AND SINGLE-PARENT HOUSEHOLDS

Cohabiting households make up about seven percent of all low-income households (Table IV.1).[2] In terms of demographic characteristics, household composition, and economic circumstances, there are some important differences between cohabiting households and both married- and single-parent households, and these differences are likely to influence their eligibility and participation rates in TANF and FSP. Along some dimensions, cohabiting households are more similar to married-parent households; along other dimensions, they are more similar to single-parent households.

The heads of low-income cohabiting households (average age of 31) tend to be younger than the heads of low-income single-parent or married-parent households (average ages of 36 and 37, respectively. Heads of low-income cohabiting households also tend to have completed less education than the heads of either low-income married- or single-parent households—37 percent of the heads of low-income cohabiting households have not completed high school, compared to

[1] We examined the age ranges of partners in married and cohabiting households that we could identify directly from the CPS to determine whether there was a natural age difference that we could use to identify likely partners.

[2] Since these statistics are computed at the household level, they incorporate the characteristics of the cohabiting partner, who is considered part of the household but is not classified as a member of the family in the CPS.

TABLE IV.1

SUMMARY STATISTICS, ALL LOW-INCOME HOUSEHOLDS
(Percentages, Unless Otherwise Noted)

		Family Type		
	All	Married-Parent	Cohabiting	Single-Parent
Percent of Families That Are				
Married-parent	48.7	100.0	0.0	0.0
Cohabiting	6.8	0.0	100.0	0.0
Single-parent	44.5	0.0	0.0	100.0
Demographic Characteristics				
Age of Household Reference Person				
Younger than 25	13.5	9.2	31.0	15.4
25 to 34	33.6	33.9	38.9	32.4
35 to 44	34.6	38.4	23.4	32.2
45 or older	18.4	18.5	6.7	20.0
(Average age of household reference person)	36.1	36.6	30.6	36.2
Educational Attainment of Household Reference Person				
Less than high school	30.2	30.7	36.5	28.7
High school diploma or GED	37.8	36.2	39.5	39.3
Some college	24.7	23.5	20.5	26.6
College or more	7.3	9.6	3.5	5.5
Race/Ethnicity of Household Reference Person				
Hispanic	24.5	29.7	28.0	18.2
White, non-Hispanic	47.4	53.1	49.6	40.9
Black, non-Hispanic	22.8	10.5	17.9	37.0
Other	5.3	6.7	4.5	3.8
Citizenship Status of Unit Head				
Native U.S. citizen	77.8	69.3	82.4	86.4
Naturalized U.S. citizen	6.8	9.5	2.8	4.4
Noncitizen	15.5	21.3	14.8	9.2
Household Composition				
Number of Children in Household				
1	31.8	24.7	32.9	39.3
2 or 3	55.6	59.7	57.9	50.8
4 or 5	10.7	12.9	8.8	8.7
6 or more	1.9	2.7	0.4	1.2
(Average number of children in household)	2.2	2.4	2.1	2.0

TABLE IV.1 (*continued*)

	All	Family Type		
		Married-Parent	Cohabiting	Single-Parent
Number of Adults in Household				
1	32.0	0.1	0.8	71.6
2	53.3	80.5	86.5	18.6
3	10.3	13.6	6.7	7.2
4 or more	4.3	5.8	6.1	2.5
(Average number of adults in household)	1.9	2.3	2.2	1.4
Economic Characteristics				
Household Income as Percentage of Federal Poverty Level				
0 to 49	20.0	11.5	14.5	30.0
50 to 99	20.4	18.9	20.9	21.9
100 to 129	17.7	18.5	21.1	16.4
130 to 200	41.9	51.1	43.5	31.7
Presence of Earnings				
Household has earnings	81.1	89.8	90.4	70.2
Household does not have earnings	18.9	10.2	9.6	29.8

Source: Calculations from data from the Urban Institute's TRIM3 model and the March 2001 CPS, conducted by Mathematica Policy Research, Inc.

Note: Household head refers to the household reference person in the CPS.

31 percent of the heads of low-income married-parent households and 29 percent of the heads of low-income single-parent households. Like the heads of low-income married-parent households, the heads of low-income cohabiting households are more likely to be Hispanic or white, non-Hispanic than the heads of low-income single-parent households, and the heads of single-parent families are more likely to be black, non-Hispanic than are the heads of the other two types of households.

Among the low-income population, cohabiting households tend to be smaller than married-parent households but slightly larger than single-parent households. Cohabiting households have an average of 2.1 children, compared with married- and single-parent households, which have an average of 2.4 and 2.0 children, respectively. Similarly, on average, cohabiting households have about the same number of adults (2.2) as married-parent families (2.3), but more than single-parent families (1.4). This is not surprising, since by definition, both married-parent and cohabiting households must contain at least two adults, but single-parent households may contain only one.

Among the low-income population, the economic circumstances of cohabiting households are more similar to those of married-parent households than to those of single-parent households, and both married-parent and cohabiting households tend to be better off economically than single-parent households. Fifteen percent of low-income cohabiting households have incomes below 50 percent of the poverty line, compared to 12 percent of low-income married-parent households and 30 percent of low-income single-parent households. Similarly, approximately 90 percent of cohabiting and married-parent households have some earnings, compared to only 70 percent of low-income single-parent households.

C. TANF AND FSP ELIGIBILITY AND PARTICIPATION RATES OF COHABITING HOUSEHOLDS

Eligibility rates for TANF among low-income households are somewhat higher for cohabiting households (51 percent) than for single-parent households (41 percent), and both are considerably higher than those for married-parent households (15 percent) (Figure IV.1). As discussed above, cohabiting households tend to be economically better off than single-parent households. Since the TRIM model simulates eligibility at the *unit* level, however, the income of the cohabiting partner does not factor into the eligibility simulation, even though it does contribute to total *household* income.[3] Since TANF units in these low-income cohabiting households may have lower average income than TANF units in single-parent households, this may explain the higher simulated and actual eligibility rates of cohabiting households despite the fact that they appear to be better off economically when the cohabiting partner's income is included in the computation of total household income.

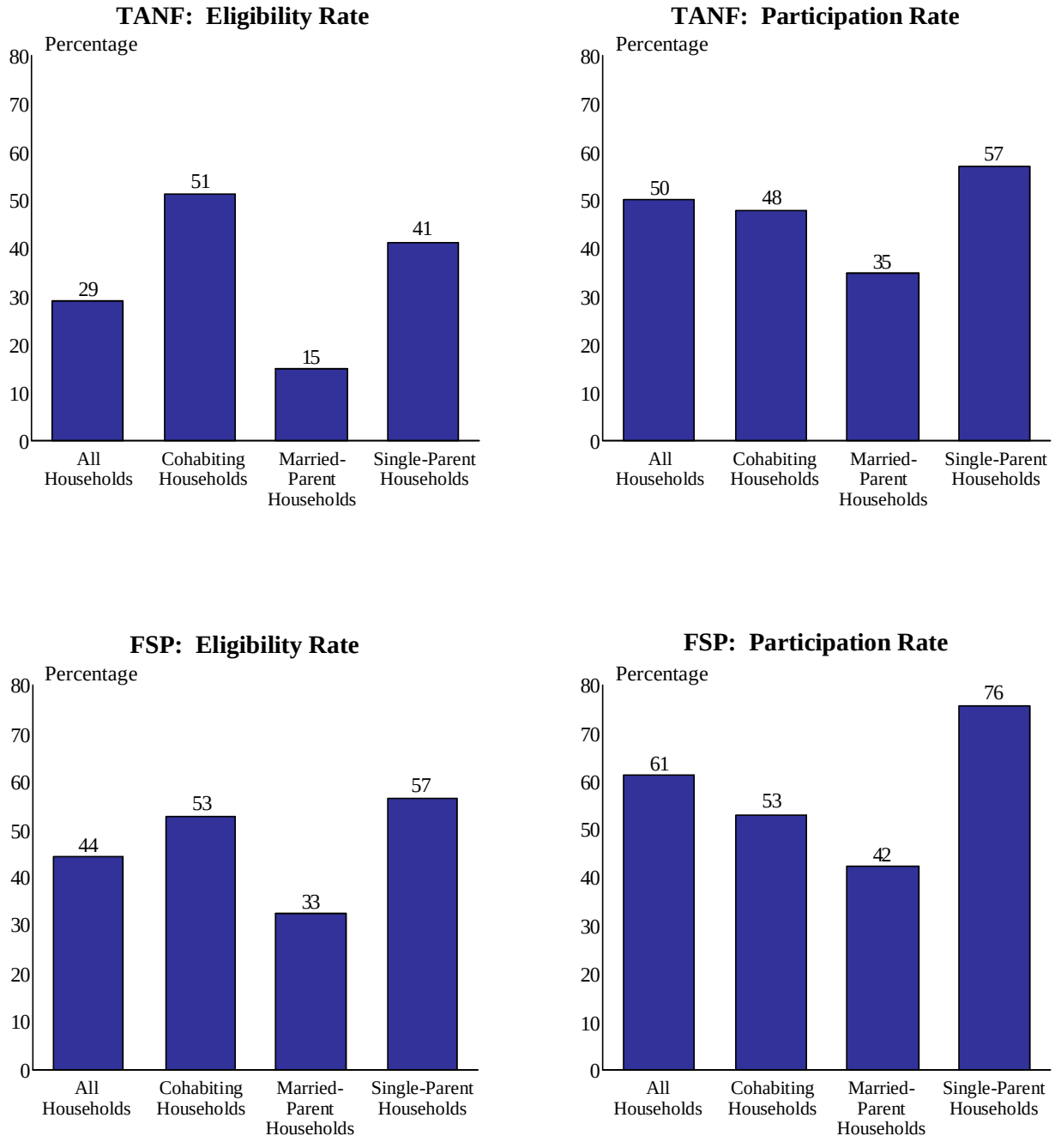
Among eligible households, TANF participation rates for cohabiting households (48 percent) fall between those for married-parent households (35 percent) and single-parent households (57 percent), but are closer to the rates for single-parent households than for married-parent households.

Among low-income households, FSP eligibility rates for cohabiting households (53 percent) are similar to those of single-parent households (57 percent), and both are considerably higher than those of married-parent households (33 percent). Since FSP unit is typically the entire household, rather than an individual family unit within the household, the cohabiting partner is likely to be included in FSP unit, and his or her income is more likely to affect FSP eligibility than to affect TANF eligibility.

[3] In practice, in some states the cohabiting partner's income may affect a family's TANF eligibility determination if the TANF office knows that the cohabiting partner is present. However, in many cases the TANF office may be unaware of the cohabiting partner's presence.

FIGURE IV.1

ELIGIBILITY AND PARTICIPATION RATES FOR TANF AND THE FSP, BY HOUSEHOLD TYPE



Source: Calculations from the March 2001 CPS, the Urban Institute's TRIM3 model, and the 2000 MATH CPS model, conducted by Mathematica Policy Research, Inc.

Among eligible households, participation rates for cohabiting households (53 percent) again fall between those of married-parent households (42 percent) and single-parent households (76 percent).

D. CHANGES IN ELIGIBILITY AND PARTICIPATION RATES OVER TIME AMONG COHABITING HOUSEHOLDS

As discussed in Chapter II, there were dramatic reductions in TANF and FSP caseloads during the mid- to late-1990s. In general, trends in TANF and FSP eligibility and participation among cohabiting households were similar to those for married- and single-parent households.

Trends in TANF eligibility rates for low-income cohabiting households were generally similar to those for low-income single-parent households (Figure IV.2). While TANF eligibility rates for low-income married-parent households remained relatively flat between 1996 and 2000, eligibility rates for both low-income cohabiting and single-parent families declined over the period, by six and nine percentage points, respectively.

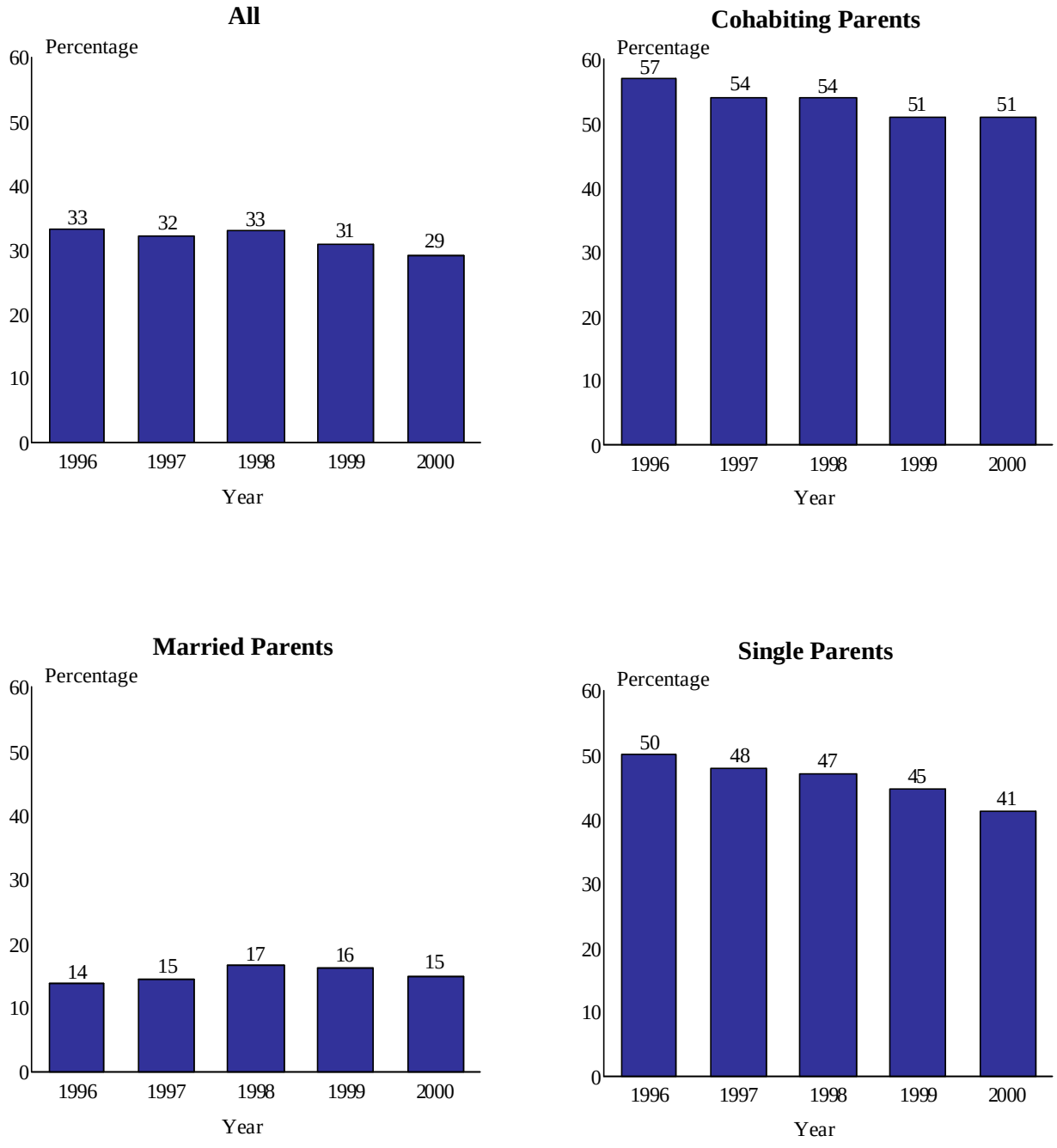
TANF participation rates for all three household types declined considerably between 1996 and 2000 (Figure IV.3). Participation rates for cohabiting households fell by 30 percentage points over this period, while rates for married-parent households also fell by 30 percentage points, and rates for single-parent households fell by 24 percentage points.

FSP eligibility among low-income households declined slightly for all three household types between 1996 and 2000 (Figure IV.4). Rates for cohabiting households fell by nine percentage points, while rates for married-parent households fell by four percentage points, and rates for single-parent households fell by seven percentage points.

FSP participation rates also declined for all three household types between 1996 and 2000 (Figure IV.5). Participation among cohabiting households fell by 17 percentage points, while

FIGURE IV.2

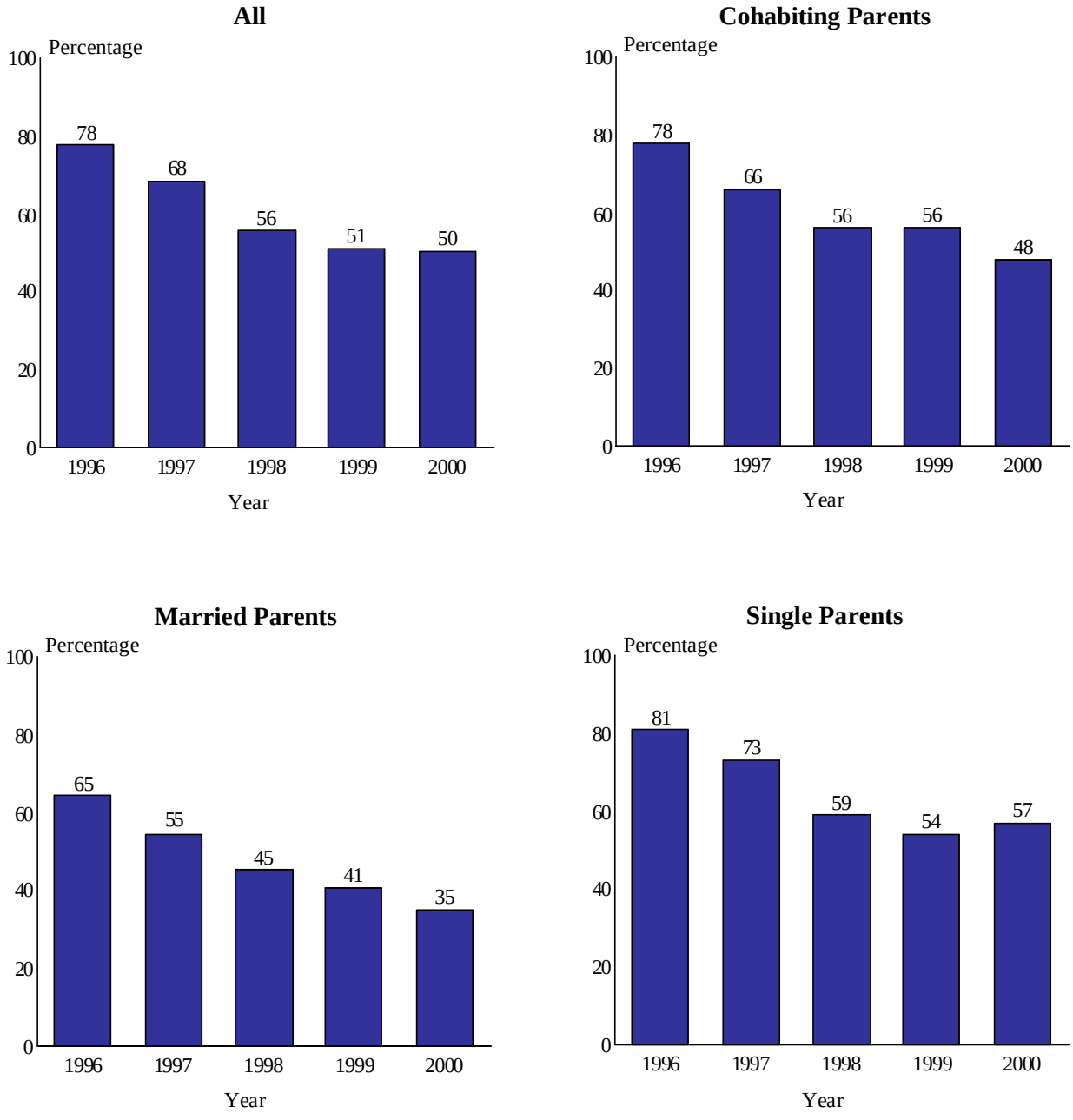
TRENDS IN TANF ELIGIBILITY RATES,
1996 TO 2000



Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

FIGURE IV.3

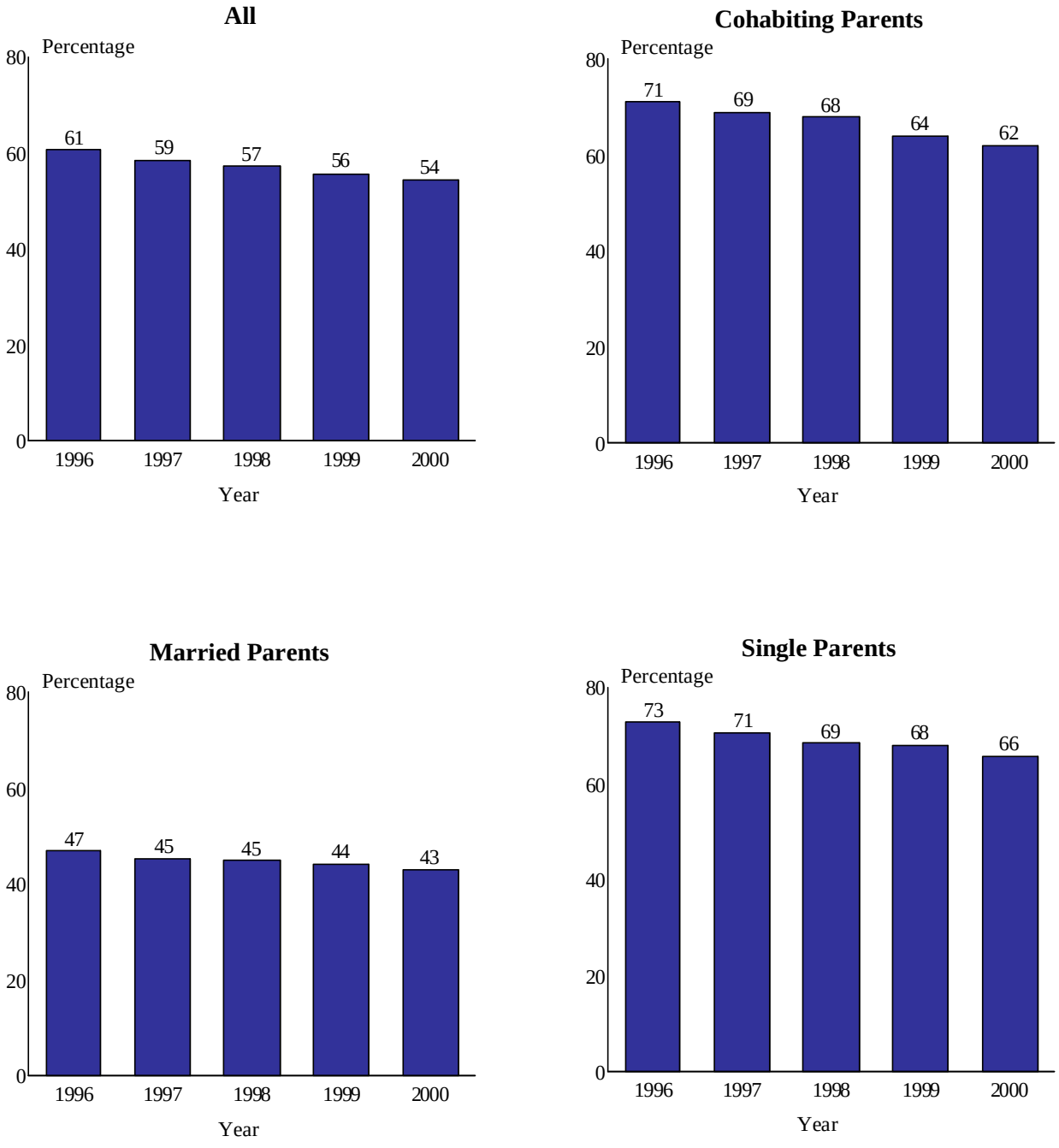
TRENDS IN TANF PARTICIPATION RATES,
1996 TO 2000



Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

FIGURE IV.4

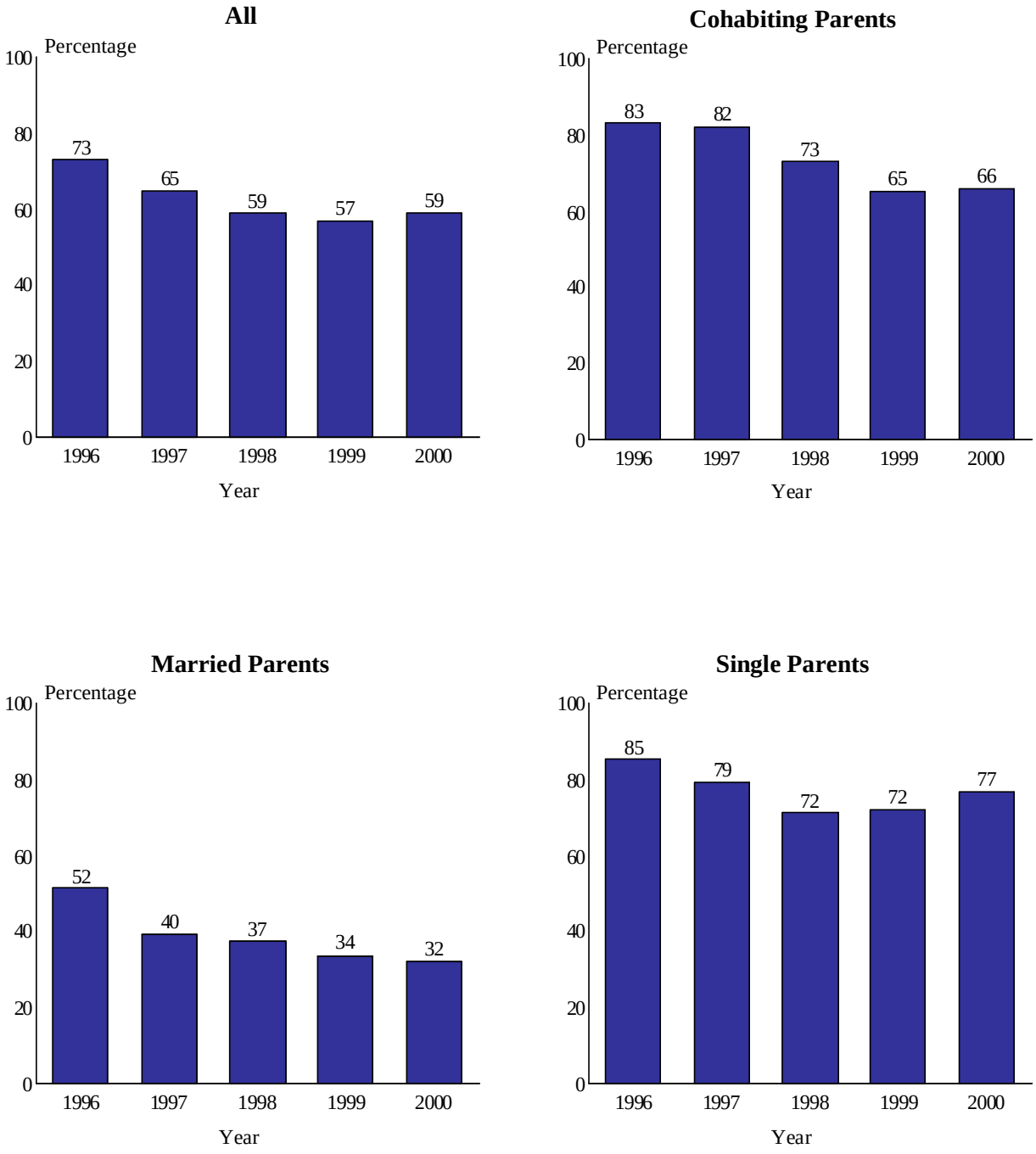
TRENDS IN FSP ELIGIBILITY RATES,
1996 TO 2000



Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

FIGURE IV.5

TRENDS IN FSP PARTICIPATION RATES,
1996 TO 2000



Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

participation rates for married-parent households fell by 20 percentage points, and participation rates for single-parent households fell by 8 percentage points.

E. CONCLUSIONS

For the most part, TANF and FSP eligibility and participation rates for cohabiting households fall between the eligibility and participation rates for single- and married-parent households (although they tend to be closer to single-parent families than married-parent families). The exception is for TANF eligibility, where cohabiting households are more likely to be eligible than both single- and married-parent households. This result may be partly due to the fact that, while cohabiting households tend to have high incomes than single-parent households, the cohabitor's income is not taken into account in the TRIM model's simulation of eligibility, and it may not influence actual eligibility, depending on whether the TANF office is aware of the cohabitor's presence. This may lead to higher simulated and actual TANF eligibility rates among cohabiting households, even though they appear to be better off economically than single-parent households when the cohabitor's income is taken into account.

The differences in TANF and FSP eligibility and participation rates between cohabiting families and both married- and single-parent families, as well as the difference in observed characteristics across household types, suggest additional directions for future research. In particular, future research could explore the extent to which differences in eligibility and participation rates can be explained by differences in observable demographic and financial characteristics between the family types, and the extent to which the differences are unexplained by observable characteristics and may instead reflect differences in the way state policies affect cohabiting families, behavioral differences between cohabiting families and the other two family types, or other unobservable differences that are correlated with TANF and FSP eligibility and

participation. Additional research on how states actually implement policies related to cohabiting households would also be fruitful.

REFERENCES

Blank, Rebecca M. and Lucie Schmidt. "Work, Wages, and Welfare." In *The New World of Welfare Reform*, edited by Rebecca M. Blank and Ron Haskins. Washington, DC: Brookings Institution, 2001.

Cunnyngham, Karen. "Trends in Food Stamp Program Participation Rates: 1999-2002." Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 2004. U.S. Census Bureau Website. Available at [www.census.gov]. Accessed January 2004.

Cunnyngham, Karen. "Technical Working Paper: Creation of the 2000 CPS-Based MATH Model and Database." Washington, DC: Mathematica Policy Research, Inc., August 2002.

U.S. Census Bureau Website. Available at [www.census.gov]. Accessed January 2004.

APPENDIX A

DATA SOURCES, SAMPLES AND KEY DEFINITIONS, AND METHODOLOGICAL APPROACH

To examine issues related to eligibility and participation rates, we used the TRIM3 and MATH® CPS microsimulation models, combined with data from the Current Population Survey (CPS). Because of the wide range of study questions we wished to answer, we used data from both microsimulation models, various samples, and various methodological approaches. In this appendix, we first describe our data sources for the study. We then discuss how we defined the family types and describe our units of analysis for the study questions. We then describe the sample used for our study. Finally, we outline the methodological approach we used to examine TANF and FSP eligibility and participation rates and the factors associated with these rates.

A. DATA SOURCES

As described, the primary data for the analyses are the CPS data and data from the TRIM3 and MATH CPS microsimulation models. These data were supplemented with state-level data on key program parameters, as well as data on the economic conditions and poverty levels in each state.

1. CPS and the TRIM3 and MATH Microsimulation Models

The CPS is a monthly survey of about 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics and is the primary source of information on the labor force characteristics of the U.S. population. The sample is representative of the civilian noninstitutional population, and respondents are interviewed to obtain information about the employment status of each member of the household age 15 or older. The March CPS supplement contains annual demographic information and includes detailed information on income and program participation.

While the CPS data contain several variables that are important for our study, it is not straightforward to determine TANF or FSP program eligibility from the CPS. CPS does not ask people directly for information on eligibility, as program rules are complex, and not everyone

will know if they are eligible for a particular benefit. FSP eligibility is determined at the national level according to several factors, including a household's gross income and net income (based on a number of deductions for expenses), value of assets and vehicles, and household size and composition. TANF eligibility is determined at the state level based on a similar set of factors and is even more complex, as states can each set their own specific eligibility rules, subject to the broad federal guidelines.

Various federal government agencies use microsimulation models, such as the MATH CPS and TRIM3, to simulate the effects of potential policy changes on eligibility and participation. Essentially, a microsimulation model uses a database that contains relevant information on people and households as its input and applies a set of rules to each unit to simulate the effects of the different transfer programs. One of the main pieces of data generated by the microsimulation models is predicted program eligibility. These models use information on individuals in a household and their relationships to determine the appropriate program unit. They then aggregate reported income to come up with total unit income. The models typically take into account types and amount of income, household size and composition, presence of earnings, citizenship status, state of residence, and other key variables used for eligibility determination and apply program rules to determine eligibility. In addition to simulating eligibility, these models also simulate program participation, as government agencies want to know about the effects of policy changes on participation as well as eligibility.

Because eligibility and participation are key variables in our study, we used data from the TRIM3 microsimulation model, run by Urban Institute staff, and the MATH CPS model, run by MPR staff. Each of these microsimulation models uses the CPS database as the input.

Each of the two microsimulation models has advantages and drawbacks in its ability to simulate the TANF program and FSP. The MATH CPS model focuses on FSP and carefully

models FSP rules and the asset and vehicle restrictions required for calculating eligibility. The U.S. Department of Agriculture's Food and Nutrition Service has used this model extensively for its program simulations. The MATH CPS model does not model TANF rules in a detailed manner, however. Conversely, the TRIM3 model carefully models state TANF program rules and is used extensively by ASPE for welfare policy simulations. While not quite as detailed as the MATH CPS, TRIM3 also models FSP, and it can be used to conduct FSP simulations for certain purposes. Because of the range of questions and programs this study examines, we used data generated from both microsimulation models to address the study questions, drawing on the most appropriate data source for each question.[1]

a. Analysis of Current Eligibility and Participation Rates Among Single- and Married-Parent Households and Key Subgroups

For the reasons described above, we used the TRIM3 simulation data for the TANF program and the MATH CPS data for FSP to examine current eligibility and participation rates for married-parent households and for key subgroups. Both models generate estimates using the March 2001 CPS data, which contain income information for the calendar year 2000. This is the most recent year for which the microsimulation models are available. Table A.1 displays sample sizes for the eligibility and participation analysis by household type and key subgroups.

From both models, we obtained the simulated program eligibility variables. Both microsimulation models also generate estimates of the number of participating households. While the CPS asks respondents directly about their program participation, these self-reports appear understated when compared to participation rates calculated from administrative data. In contrast, the microsimulation models' predictions of participation rates are, by design, close to

[1] Information on the TRIM3 model can be obtained from http://trim3.urban.org/T3Welcome.php. Information on the MATH CPS model can be obtained from Cunnyngham 2002.

TABLE A.1

SAMPLE SIZES FOR TANF AND FSP ELIGIBILITY AND PARTICIPATION ANALYSIS, BY HOUSEHOLD TYPE AND BY KEY SUBGROUPS

	TANF Households			FSP Households		
	Low Income	Eligible	Participating	Low Income	Eligible	Participating
All	6,010	1,769	919	5,981	2,660	1,365
Married-parent	3,123	554	181	3,142	1,060	371
Single-parent	2,481	1,008	625	2,444	1,392	896
Cohabiting	406	207	113	395	208	98
Age of Household Head						
Younger than 25	715	311	172	721	408	214
25 to 34	2,049	587	267	2,006	940	503
35 to 44	2,132	532	250	2,128	878	428
45 or older	1,114	339	230	1,126	434	220
Race/Ethnicity of Household Head						
Hispanic	2,007	645	306	2,168	1,027	462
White, non-Hispanic	2,723	650	348	2,516	950	500
Black, non-Hispanic	948	352	201	921	520	323
Other race, non-Hispanic	332	122	64	376	163	80
Number of Children in Household						
1	1,863	515	356	1,929	823	400
2 or 3	3,337	934	425	3,266	1,406	724
4 or 5	699	270	122	674	362	202
6 or more	111	50	16	112	69	39
Household Income Relative to Poverty Level						
Less than 50 percent	1,127	950	505	1,404	1,066	755
50 to 99 percent	1,327	455	159	1,332	970	439
100 to 130 percent	1,056	163	62	950	497	82
Greater than 130 percent	2,500	201	193	2,236	83	70
Presence of Earnings in Household						
Has earnings	4,989	1,070	495	4,707	1,766	694
Does not have earnings	1,021	699	424	1,274	894	671
Household TANF Participation						
Participates	1,811	1,207	866	588	504	523
Does not participate	4,199	562	53	5,393	2,156	842

Source: Data from the March 2001 CPS, the Urban Institute's 2000 TRIM3 Microsimulation model, and the 2000 MATH CPS microsimulation model.

Note: Household head refers to the household reference person in the CPS.

the rates in administrative data. Because one goal of this study is to obtain estimates of participation rates by key subgroups, for the descriptive portion of the analysis, we used simulated participation to calculate participation rates among those who were eligible.

b. Trends in Eligibility and Participation Rates over Time for Married-Parent Households

In conducting a trend analysis, it is important to have a model and data that are reasonably consistent and comparable over time. A model may be changed for several reasons. One reason is that the program rules changed, and the microsimulation models are changed to reflect these rules. In addition, models may be periodically modified for other reasons, such as updating of definitions and other enhancements. While the former changes reflect true changes in program rules, the latter types of changes can lead to changes in simulations of eligibility and participation rates over time that do not reflect true changes in these rates.

We therefore used data from various years of the TRIM3 model to estimate trends in time for both TANF and FSP. Although FSP estimates generated by the TRIM3 model may be less precise than those generated by the MATH CPS model, the TRIM3 model is available with greater consistency over a longer period. For our trend analysis, we examined eligibility rates among low-income individuals and participation rates among those who were eligible for the years 1996 through 2000, overall, and by family type.

c. Analysis of Factors Related to Eligibility and Participation

Our analysis of factors related to eligibility focuses only on the TANF program, because TANF eligibility is set at the state level, and there may be variation across the states in policy factors related to TANF eligibility. In contrast, FSP eligibility is set largely at the federal level, so we should not expect to see much variation in policy factors related to FSP eligibility. Therefore, key outcome variables for the analysis of factors related to eligibility and participation

include the following: (1) TANF eligibility among low-income families, (2) TANF participation among eligible families, and (3) FSP participation among eligible families.

We used data generated by the TRIM3 model to analyze factors related to TANF eligibility, since self-reported information on eligibility is not available. To analyze factors related to TANF and FSP participation, however, we used self-reported information on program participation, rather than simulated information. In a multivariate analysis of the factors associated with program participation, the self-reported data provide more reliable estimates, even though we know that program participation is underreported in the CPS. This is because, even if there is measurement error in the dependent variable, estimates will be unbiased as long as the error in the dependent variable is statistically independent of the explanatory variables. Since the microsimulation models simulate participation based on many of the same variables we include as explanatory variables in our own models, any error in the simulated participation data would be systematically related to the explanatory variables and would lead to biased estimates. In contrast, it is more reasonable to assume that errors in the self-reported data are uncorrelated with the explanatory variables in our model and, therefore, that our estimates using the self-reported data will be unbiased (although they will be less precisely estimated than they would be if there were no error in the dependent variable). Since we must rely on simulated data for our analysis of TANF eligibility rates, error in the simulated data may lead us to overstate the explanatory power of our independent variables.

FSP eligibility is not an outcome variable in our multivariate analysis, but we need this variable to determine the sample for our FSP participation analysis. We used data from the TRIM3 model to determine our sample of FSP eligible-families, for consistency with the TANF

participation analysis.[2] Our analysis uses data for March 2000.[3] In addition to these key outcome variables, we used data on demographic and socioeconomic characteristics from the CPS as independent variables that might affect program eligibility and participation (Table A.2).

2. Indicators of State Program Policies

The TANF program rules are determined at the state level, and there may be variation in state program rules that affect eligibility rates. (Our models include only policies that vary across states, since we are unable to separately identify the relationship between program eligibility or participation and policies that do not vary across states.) In addition, some state program rules for TANF and FSP may affect participation among those who are eligible for the programs. Table A.3 lists the policy variables we considered for our analysis. We describe these policies in greater detail below.

Policies Related to TANF Eligibility. The types of policies that might affect TANF eligibility rates include state treatment of income, earnings, and assets (such as income levels to qualify for TANF benefits, the earnings disregards, and asset and vehicle limits). Other policies may cover time limits and the treatment of legal aliens. Finally, states may have policies that apply specifically to determining eligibility for married-parent families, such as statewide coverage of these families, whether eligibility is based solely on financial circumstances or whether a state also requires one parent to be incapacitated or the principal wage earners to be unemployed, and whether hours worked or a work history test is used to determine eligibility.

[2] For nearly 75 percent of families in our sample, FSP eligibility determination is consistent across the TRIM3 and MATH CPS models. FSP participation results using MATH CPS predictions of eligibility to determine the sample are substantively similar to those from the sample based on TRIM3 predictions of eligibility.

[3] The microsimulation models generate estimates of eligibility and participation for each month of the previous calendar year. For our analysis, we selected March primarily because it corresponds to the same month for which we have demographic data. The analysis of factors related to eligibility and participation is not sensitive to the choice of the month selected, however. At the time of the analysis, 2000 was the most recent year for which full simulations were available.

TABLE A.2

DEMOGRAPHIC AND FINANCIAL VARIABLES USED IN THE MULTIVARIATE ANALYSES

	Eligibility Analysis	Participation Analysis	
	TANF	TANF	FSP
Demographic Variables			
Citizenship status of unit head	x	x	x
Number of units in household	x	x	x
Number of people in unit	x	x	x
Number of adults in unit	x	x	x
Number of adult earners in unit	x	x	x
Presence of other adults in household	x	x	x
Presence of children in household, by age group	x	x	x
Age of unit head		x	x
Race/ethnicity of unit head		x	x
Educational attainment of unit head		x	x
Central city residence		x	x
Eligibility for TANF			x
Eligibility for FSP		x	
Amount of TANF benefits for which unit is eligible[a]		x	
Amount of FSP benefits for which unit is eligible[a]			x
Financial Variables			
Monthly earnings of unit	x	x	x
Monthly income of unit	x	x	x
Household income in addition to unit income	x	x	x
Monthly assets of unit	x	x	x
Unit income relative to poverty level	x	x	x

Source: CPS data and simulations from the Urban Institute's TRIM3 model.

[a]Predicted by the TRIM3 model.

TABLE A.3

STATE POLICY VARIABLES THE FOR THE MULTIVARIATE ANALYSES

Analysis	Indicator Variable
TANF Eligibility Analysis	
TANF time limit policy	Lenient/moderate/strict
TANF earnings disregards	Low/medium/high
TANF diversion program	Yes/no
Restrictions on two-parent family eligibility	Yes/no
TANF Participation Analysis	
Amount of TANF benefits for which unit is eligible	Dollar value
TANF sanctioning policy	Lenient/moderate/strict
TANF time limit policy	Lenient/moderate/strict
State has diversion program	Yes/no
Restrictions on benefits to two-parent families	Yes/no
FSP Participation Analysis	
Amount of FSP benefits for which unit is eligible	Dollar value
State has EBT system	Yes/no
FSP recertification reporting requirements on income	Monthly changes/changes less frequently than monthly
Average months to recertification for units with children	Number of months
FSP sanctioning policy	Partial/full sanctions

Source: Welfare rules database from the Urban Institute; and Blank and Schmidt (2001).

EBT = electronic benefit transfer.

Policies Related to TANF and FSP Participation. When deciding whether to participate in TANF or FSP, eligible families are likely to consider both the costs and the benefits of program participation, and many factors can affect these decisions. Policies related to the benefits of TANF participation include the amount of TANF benefits for which a particular family is eligible (Table A.3). Other potential benefits of program participation include child care subsidies or other work-related benefits that the state may provide. Policies that affect the cost of TANF participation include the stringency of a state's work requirement programs and the state's sanctioning policy (which also reflects the stringency of work requirements). Other policies related to eligibility that may affect a family's decision to participate include whether the state has a lump-sum diversion program, the stringency of its time limit policies, and whether the state places restrictions on the benefits available to two-parent families.

The benefits of FSP participation are reflected in the amount of FSP benefits for which a particular family is eligible. FSP participation also has costs to families in the time and effort required to obtain and use benefits. A state's use of an electronic benefit transfer system is likely to increase the convenience of benefit use. FSP reporting requirements for recertification (whether the state requires monthly reporting of income, reporting of changes in income, or reporting of income on a basis less frequent than monthly) reflect the ease or difficulty of obtaining benefits. A related measure likely to affect eligibility rates is the average length of the recertification intervals for families with children; in general, longer recertification intervals are associated with less-frequent administrative requirements to retain benefits. Finally, whether the state imposes only partial FSP sanctions or full sanctions reflects the stringency of FSP work requirements and is likely to affect a family's decision to participate in the program.

3. Indicators of State Economic Conditions

To explore the relationship between state economic conditions and participation rates among families who are eligible, we used data on a number of state economic conditions, including the state unemployment rate, gross weekly wages, state minimum wages, mean wage in the manufacturing sector, the poverty rate, and the percentage of the population living in metropolitan areas (Table A.4). These variables are likely to reflect the labor market situations that low-income people face and the overall economic circumstances of the states. Although we experimented with several of these variables, the high correlation between some of them led us to include only a subset in our final analyses.

TABLE A.4

STATE ECONOMIC VARIABLES

Variable
Unemployment rate[a]
Gross weekly wage[a]
Minimum wage
Mean wage in manufacturing sector
Poverty rate[a]
Percent metropolitan [a]

[a]Included in final analysis.

B. KEY DEFINITIONS

A critical issue in understanding participation among married-parent families and comparing the participation of those families with that of single-parent families is how to define these family types. While defining married-parent households is relatively straightforward, single-parent families could be defined as those with only one adult in the household or could include all single-parent households, whether or not other adults reside in the household. For this analysis, we decided to distinguish between single-parent and cohabiting families—or those with a single parent and a cohabiting, but unmarried, partner. The main focus of our analysis is program eligibility and participation of married-parent families relative to that of single-parent families. However, in Chapter IV, we examine the eligibility and participation of cohabiting families. In addition to the conceptual definitions of married-parent, single-parent, and cohabiting households, CPS data have some shortcomings that do not allow for easy identification of family type in all cases. Another key decision we considered was the appropriate unit of analysis for estimating eligibility and participation for each of the programs. We discuss definitions for each of these factors below.

1. Defining Family Type

Our primary goal is to examine issues related to TANF and FSP eligibility and participation among families with children. We focus on families in which at least one parent of the child lives in the household.[4] We classified families as single-parent families, married-parent families, and cohabiting families.

It is fairly straightforward to identify married-parent families and many cohabiting couples from the CPS using self-reported information about relationships. The CPS data contain detailed

[4] We do not include households in which a grandparent raises the child and neither parent is present.

information about the family relationships of household members, such as spouses, parents, children, and siblings. The CPS also provides information about the relationship between unrelated individuals (such as partners and roommates) and the reference person.[5] Thus, it is easy to identify whether a child's parent is married.

Identifying cohabiting households and single-parent households is more challenging, however. If the child's parent is the household reference person, then it is straightforward to determine whether the family is a cohabiting one, as the relationships between all unrelated adults and the reference person are provided in the CPS. Similarly, if the child is the child of the partner of the household reference person, it is again possible to identify cohabiting households. In households in which the child's parent is not the reference person (or the partner of the reference person), however, and unrelated adults live in the household, it is not straightforward to identify whether it is a cohabiting household.

We tested various approaches to identifying cohabiting couples with children in households in which the unmarried parent was neither the reference person nor the partner of the reference person. To determine whether an unmarried parent might have a partner, we looked across all unmarried, unrelated individuals in the household of the opposite sex whose ages were within a certain number of years of the parent's age.[6] After some exploration, we decided to identify a parent as cohabiting if there was an unmarried, unrelated individual of the opposite sex of the parent in the household whose age was within 10 years of the parent's age. Given this definition,

[5] The CPS defines a reference person as "the first household member mentioned by the respondent who is the owner or renter of the sample unit. For persons occupying the sample unit without payment of cash rent, the reference person is the first household member listed who is 15 years of age or older."

[6] We examined the age ranges of partners in married and cohabiting households that we could identify directly from the CPS to determine whether there was a natural age difference that we could use to identify likely partners.

any family with a child and his or her parent present that is not classified as a two-parent family is classified as a single-parent family.

In identifying family types, we also decided, based on discussions with ASPE, to disregard the presence of other adults (such as grandparents, aunts and uncles, and other unrelated adults). Thus, single-parent families can include other adults who are present in the household, as long as none of the other adults appears to be the partner of the parent according to our algorithm described above. Similarly, married-parent and cohabiting families may also include other adults living in the household, in addition to the parents (or parent and cohabiting partner).

2. Defining the Unit of Analysis

Because eligibility for TANF and eligibility for FSP are based on different household/family units, it is necessary to understand how the family/household structure interacts with eligibility requirements and the implications of those program differences for the analysis. The two microsimulation models identify, within each household, the appropriate program unit (that is, the people to be treated as a group for determining eligibility for each program). Typically, the TANF unit is a family. For nearly all cases, FSP unit refers to the household.

Because of ASPE's interest in keeping a common sample for determining eligibility in TANF and FSP, in our descriptive analysis, we examined eligibility and participation rates at the household level. Analyzing households rather than families for the descriptive analysis allows us to capture the characteristics of cohabiting partners, who would be excluded from a descriptive analysis of families, since they are not classified as part of the family unit. Because the

eligibility and participation determinations are made at the program-unit level, we aggregated the units to the household level.[7]

In our multivariate analysis, however, we focused on the program unit as the primary unit of analysis. The multivariate analysis allows for more flexibility than the descriptive analysis because we can control for both household- and unit-level characteristics that are likely to affect an individual unit's eligibility status or decision to participate in TANF or in FSP. To model the unit's eligibility determination or participation decisions, we therefore conducted the multivariate analysis at the program unit level but included both household- and unit-level characteristics as covariates.

C. STUDY SAMPLES

As discussed earlier, our basic sample includes families with children under age 18 in the household. Before we conducted our analyses, we had to further identify three samples of interest: (1) low-income households, (2) eligible households (or program units), and (3) participating households (or program units).[8]

1. Identifying "Low-Income" Households

To estimate the fraction that is eligible from among those likely to be at risk of needing program supports, we defined a sample of low-income households. After discussions with ASPE, we decided to include in our analysis all families with total *household* income under 200

[7] It is possible that more than one family type lives in the same household, and we need to assign multi-unit households only one family-type status. For example, a married couple may have in their household children under 18 and an unmarried daughter who has her own child. In this case, the married couple heads a married-parent family, while a single-parent family also lives in the household. We set the household-level family-type status based on the status of the household reference person. In this case, if the married father is the household reference person, we assign the household a status of married-parent household. If the household reference person is not in a family with children under 18, we assign the household status as that of the first person with an assigned family status.

[8] Table A.1 presents sample sizes overall, and by key subgroups.

percent of the federal poverty level, where household income includes all types of cash income (for example, social security, supplemental security income, and retirement income) except TANF income.[9] Setting the income level at 200 percent of poverty ensured that we captured almost all people eligible for TANF and FSP. About 35 percent of all households containing families with a child and at least one parent had incomes below 200 percent of the poverty level.

2. Identifying Eligible Units and Households

To calculate eligibility rates among the low-income population, we needed to identify eligible families. For the descriptive portion of our analysis, conducted at the household level, we used the eligibility measure generated by the relevant microsimulation models but applied it at the household (rather than the unit) level. We identified a household as *eligible* if it contained a family with a child and parent present and if at least one member of that family was in an eligible program unit. For the multivariate analysis, we used simulated unit-level eligibility.

3. Identifying Participating Units and Households

To calculate participation rates among low-income people, we had to know who actually received program benefits. One obvious way to determine this is to use the self-reported information from the CPS on TANF and FSP participation. Because survey respondents tend to underreport program participation, however, an alternative is to use simulated participation data from the microsimulation models, which are designed to predict participation rates that more accurately reflect the rates observed in administrative data.

In our descriptive analysis, we used simulations from either the TRIM3 or MATH CPS model to determine whether a household was participating in TANF or FSP. These rates, which

[9]We excluded TANF income because it is not a factor in a unit's eligibility determination.

we present in aggregate terms for the national population and for major subgroups, are likely to be closer to the actual fraction participating in the programs than are rates based on CPS self-reports.[10] As discussed earlier, for the multivariate analysis of participation rates, we used the March CPS self-reported program participation data. Because we are concerned with the relationship between various factors and program participation, rather than with the levels of program participation, the self-reported data are likely to provide the most accurate estimates.

D. METHODOLOGICAL APPROACH

To address the key research questions, we conducted both descriptive and multivariate analyses. In this section, we describe the methodological approach we used in each part of our analysis.

1. Descriptive Analysis

The descriptive analysis provides information on eligibility and participation rates in TANF and in FSP among married-parent households. We compared these rates with the rates for single-parent households. We provide estimates for the population as a whole and for key subgroups.

Key subgroups that we considered were:

- Age of the household reference person
- Race/ethnicity of the household reference person
- Number of children in the household
- Household income relative to poverty level
- Presence of earnings in the household

[10] As with the eligibility determination, we identified a household as *participating* if the household contained a unit with a child and parent present and if someone in that unit was participating in the program.

- Other program participation

All our estimates are weighted, using the household weights from the microsimulation models.

We also examined trends in eligibility and participation between 1996 and 2000, by household type, and examined the sources of changes in total participation. The number of eligible low-income households each year is the product of the number of low-income households and the eligibility rate among these households, and the number of low-income participating households is a function of the number of eligible low-income households and the participation rate among these households:

(1) $E_{2000} = e_{2000} * N_{2000}$, and

(2) $P_{2000} = p_{2000} * E_{2000}$, where

N_x = the number of low-income households in year *x*,
P_x = the number of participating low-income households in year *x*,
E_x = the number of eligible low-income households in year *x*,
e_x = the eligibility rate among low-income households in year *x*, and
p_x = the participation rate among eligible low-income households in year *x*.

We can therefore express total participation among low-income households as the product of the number of low-income households, the eligibility rate among these households, and the participation rate among these households:

(3) $P_{2000} = p_{2000} * e_{2000} * N_{2000}$

To examine the determinants of *changes* in total participation over time, it is useful to decompose the total change into the approximate change due to each of these three components. We decompose the change in total participation as follows:

(4) $P_{2000} - P_{1996} \approx \bar{p} * \bar{e} * (N_{2000} - N_{1996}) + \bar{p} * \bar{N} * (e_{2000} - e_{1996}) + \bar{e} * \bar{N} * (p_{2000} - p_{1996})$, where

$\bar{N}$ = the average number of low-income households between 1996 and 2000,
$\bar{p}$ = the average participation rate among eligible low-income households between 1996 and 2000, and
$\bar{e}$ = the average eligibility rate among low-income households between 1996 and 2000. [11]

Conceptually, the first term, or $\bar{p} * \bar{e} * (N_{2000} - N_{1996})$, measures the effect on the number of participating households when the number of low-income households changes but the eligibility and participation rates remain constant. The second term, $\bar{p} * \bar{N} * (e_{2000} - e_{1996})$, measures the effect on the number of participating households when the eligibility rate changes but the number of low-income households and participation rate remain constant. The third term, $\bar{e} * \bar{N} * (p_{2000} - p_{1996})$, measures the effect on the number of participating households when the participation rate changes but the number of low-income households and eligibility rate remain constant.

Note that since eligibility and participation rates must be computed for a common sample for this decomposition, we compute the participation rate as the percentage of eligible *low-income* households that participate. These rates may differ slightly from those presented elsewhere in the report which are not limited to low-income households, since a small number of eligible families live in households with incomes greater than 200 percent of the poverty level.

[11] This approximation can be derived from the following identities:

$P_{2000} - P_{1996} = \bar{p} * (E_{2000} - E_{1996}) + \bar{E}(p_{2000} - p_{1996})$, and

$E_{2000} - E_{1996} = \bar{e} * (N_{2000} - N_{1996}) + \bar{N} * (e_{2000} - e_{1996})$.

2. Multivariate Analysis

In addition to providing valuable descriptive information on eligibility and participation rates in TANF and FSP, a major goal of this study is to learn more about *why* the eligibility and participation rates of low-income single-parent families and low-income married-parent families differ. A variety of factors can affect program eligibility and participation and may partly or fully account for the differences in rates we observed between the two groups. These factors include individual demographic characteristics and financial circumstances, state program policies, and state economic conditions.[12] Our analysis of factors affecting eligibility rates among low-income families focuses only on the TANF program. We do not examine FSP eligibility, because FSP eligibility rules are determined at the federal level, and policy variation across states is unlikely to explain any of the differences in FSP eligibility across family types.

Our multivariate analysis therefore focused on the following three outcomes: (1) TANF eligibility among the low-income population, (2) TANF participation among the eligible population, and (3) FSP participation among the eligible population. Below, we describe the methodology we used to explore possible factors related to these outcomes.

a. Analysis of Factors Affecting Eligibility or Participation

To explore how various factors affect program eligibility or participation, we estimated, for each of the three analyses, linear probability models of program eligibility or participation.[13] As noted, the dependent variable in the TANF eligibility models is a variable indicating eligibility

[12] As discussed earlier, demographic characteristics that might affect a family's eligibility determination include citizenship status and family size, as state eligibility rules take these factors into account. In contrast, a much wider array of demographic characteristics, such as race, age, and education level of the family head, may be correlated with an eligible family's decision to participate in either TANF or FSP.

[13] The results of the linear probability model are similar to the results we obtain when we run a probit model, which may be a theoretically more appropriate model to run for a binary outcome variable (Table D.1). We ran a linear probability model because we wanted to easily conduct the decomposition analysis described below.

that we obtained from the microsimulation model, and the sample includes all low-income married- and single-parent households.[14] The dependent variables in the TANF and FSP participation analyses are based on self-reported participation information from the CPS, and the sample includes all eligible TANF or FSP units.

Conceptually, the eligibility decision is not a "behavioral" decision. In other words, in contrast to the participation analysis, a family does not directly "choose" whether or not to be eligible for a program (although families may have some control over earnings, family size, state of residence, or other factors that affect TANF or FSP eligibility). Eligibility is based on the complex interaction of a variety of factors, including income, assets, family size, and state program rules. Our primary goal in estimating the eligibility model is to better understand which factors are most important in determining eligibility. In contrast, the goal of the participation models is to better understand families' decision-making processes.

For each of the three analyses, we estimated several types of models, beginning with a simple model, and then building on it by adding additional covariates. We began by estimating a linear probability model of eligibility or participation that included a dummy variable for family type (single-parent, with married-parent as the omitted group) and no other covariates:

$$(1) \quad Y = \delta_0 + \delta_1 SINGLE + \xi \ ,$$

where

[14] Although this variable is "estimated" and generated by the microsimulation model, our interpretation is that it is a best guess of who is actually eligible for program benefits. In fact, if the microsimulation model can model program rules with a high degree of accuracy, it should be able to almost exactly replicate the states' eligibility determination process so that those identified by the microsimulation model as eligible would likely be the same as we would obtain if the states could provide us with the information.

Y is an indicator variable equal to 1 if the unit is eligible for (or participates in) the program of interest and 0 otherwise,

SINGLE is an indicator variable equal to 1 if the unit is headed by a single parent and 0 otherwise, and

ξ is an error term.

In this model, which has no additional covariates, the coefficient on the single-parent dummy variable represents the raw differences in eligibility (or participation) rates between single-parent families and married-parent families (the omitted group). The differences from this simple model provide a point of reference for the subsequent models.[15]

To explore the factors associated with eligibility (or participation) rates, we then included with the single parent dummy variable a series of demographic and financial covariates, as well as state fixed effects:

$$(2) \quad Y = \delta_0 + \delta_1 SINGLE + \delta_2 DEMOG + \delta_3 HHCOMP + \delta_4 FINANCIAL + \alpha_S + \xi,$$

where *Y* and *SINGLE* are defined as for equation (1) and

DEMOG is a vector of the unit's demographic characteristics,

HHCOMP is a vector of covariates reflecting household composition,

FINANCIAL is a vector of the unit's financial characteristics, and

α_S is a vector of state fixed effects.

We included in the eligibility model only the demographic variables that states are likely to consider for eligibility determination, such as citizenship status and family size. The state fixed

[15] Estimates may differ slightly from the results presented in the descriptive analysis due to differences in how the samples were constructed. Specifically, this analysis is at the unit level, rather than at household level, and is based on the March CPS data, rather than on the 2000 annual average.

effects capture any variation across states, including variation in state policies and the states' economic conditions. The coefficient on the single-parent dummy variable in this model reflects the differences in eligibility or participation rates between married- and single-parent families, holding constant both state of residence and any observed demographic and financial characteristics likely to affect the outcome variable.

Although the state fixed effects account for variation in eligibility or participation due to differences in the states in which families live, they do not enable us to identify the *sources* of differences in eligibility or participation rates across states. To separately examine the association between specific state policies and eligibility or participation rates, we estimated the following linear probability model, in which we controlled for an array of state policy variables and state economic conditions:

$$(3)\ Y = \delta_0 + \delta_1 SINGLE + \delta_2 DEMOG + \delta_3 HHCOMP + \delta_4 FINANCIAL + \delta_5 POLICY + \delta_6 ECON + \xi,$$

where:

POLICY is a vector of state policies related to eligibility or participation,

ECON is a vector of economics conditions in the state of residence,

and the other variables are defined as in the preceding equations.

Even though we controlled for several policy variables that were likely to be correlated with the outcome variable, the model cannot precisely identify the causal effect of state TANF or FSP policies; other unobserved factors, which we are not able to include in the model, are likely to be correlated with those particular policies. For example, states with more lenient TANF sanctions may be those with policy environments that are generally more favorable to the low-income population; these states may have more-generous unemployment or minimum-wage policies, which also affect a family's eligibility or participation decisions. Nonetheless, the inclusion of

the policy and state economic condition variables are likely to account for much of the cross-state variation in eligibility or participation rates, and the coefficients on the policy variables may at least suggest the association between a particular policy and the outcome variable of interest.

b. Analysis of Differences Across Family Type

Even after controlling for an array of demographic, financial, and state characteristics, residual differences in eligibility or participation rates may persist between married- and single-parent families. These remaining differences may indicate that the differences between married- and single-parent families cannot be entirely explained by variations in characteristics, but, rather, that they are due to behavioral differences across the family types (or, in the case of TANF eligibility, differences in how program policies affect the two family types).[16] In the linear probability models we have described, the coefficients on all the explanatory variables are constrained to be the same for both family types. However, behavioral differences and differences in policy effects across the family types would be reflected in differences in the coefficients for the two family types. To explore possible sources of differences across family types, we ran model (3) separately for married- and single-parent families and examined and tested how the coefficients on each variable differed across the two family types.

To understand the implications of these different models across family types, we decomposed the raw differences in eligibility and participation rates into the portion explained by differences in underlying demographic, financial, and state characteristics and the portion that our regression model cannot explain and may therefore reflect behavioral differences across

[16] Alternatively, some of the residual differences may reflect the omission of important explanatory variables from the models.

family types. For illustration, we show below how we can conduct such a decomposition. For simplicity, we include only one outcome variable and one set of factors in the equations.

Equations (4) and (5) contain the predicted values from the participation equation model, for single-parent and married-parent families, respectively.

(4) $\bar{P}_s = \hat{\delta}_{0s} + \hat{\delta}_{1s}\bar{X}_s$.

(5) $\bar{P}_m = \hat{\delta}_{0m} + \hat{\delta}_{1m}\bar{X}_m$.

By subtracting equation (5) from equation (4) and adding and subtracting the term $\bar{X}_m\hat{\delta}_{1s}$, we obtain:

(6) $\bar{P}_{m-}\bar{P}_s = (\hat{\delta}_{0tm} - \hat{\delta}_{0s}) + \bar{X}_m(\hat{\delta}_{1m} - \hat{\delta}_{1s}) + \hat{\delta}_{1s}(\bar{X}_m - \bar{X}_s)$.

This equation shows how much of the observed difference in predicted participation rates can be broken down into differences between the characteristics of the two groups (the last term on the right-hand side) and how much of the difference can be explained by differences in the coefficient estimates (or how the characteristics affect the participation decision—the second term on the right-hand side). Differences in the intercepts reflect residual factors.

APPENDIX B

STATE POLICY VARIABLES

TABLE B.1

STATE TANF POLICY VARIABLES

State	TANF Policies						
	TANF Time Limits	TANF Earnings Disregards	State Has TANF Diversion Program	Two-Parent Families Eligible for TANF	Restrictions on Two-Parent Family Eligibility for TANF	Average TANF Benefit for Families in Sample	TANF Sanctions
Alabama	moderate	low	no	yes	yes	$138	strict
Alaska	moderate	medium	yes	yes	yes	$602	lenient
Arizona	lenient	low	yes	yes	no	$283	moderate
Arkansas	strict	medium	yes	yes	yes	$148	lenient
California	lenient	high	no	yes	no	$362	lenient
Colorado	moderate	low	no	yes	yes	$277	moderate
Connecticut	strict	high	yes	yes	yes	$490	moderate
D.C.	moderate	medium	yes	yes	no	$333	lenient
Delaware	strict	low	no	yes	yes	$331	strict
Florida	strict	high	yes	yes	yes	$274	strict
Georgia	strict	low	no	yes	no	$227	strict
Hawaii	moderate	high	no	no	no	$352	strict
Idaho	strict	low	yes	yes	yes	$240	strict
Illinois	moderate	high	no	yes	yes	$269	moderate
Indiana	lenient	low	no	yes	no	$330	lenient
Iowa	moderate	high	no	yes	yes	$172	strict
Kansas	moderate	medium	no	yes	yes	$324	strict
Kentucky	moderate	low	yes	yes	no	$185	moderate
Louisiana	strict	high	no	yes	yes	$188	strict
Maine	lenient	high	yes	yes	no	$393	lenient
Maryland	lenient	low	yes	yes	yes	$233	strict
Massachusetts	strict	high	no	yes	yes	$442	strict
Michigan	lenient	medium	no	yes	yes	$352	strict
Minnesota	moderate	medium	yes	yes	yes	$302	lenient
Mississippi	moderate	high	no	yes	no	$136	strict
Missouri	moderate	medium	no	yes	yes	$230	lenient
Montana	moderate	medium	yes	yes	yes	$274	lenient
Nebraska	strict	low	no	yes	yes	$303	strict
Nevada	strict	medium	yes	yes	yes	$324	moderate
New Hampshire	moderate	high	no	yes	no	$343	lenient
New Jersey	moderate	medium	yes	yes	yes	$295	strict
New Mexico	moderate	high	yes	yes	yes	$364	moderate
New York	lenient	high	no	yes	yes	$449	lenient
North Carolina	strict	medium	yes	yes	yes	$180	moderate
North Dakota	moderate	low	no	no	no	$338	strict
Ohio	strict	high	no	yes	yes	$266	strict
Oklahoma	moderate	medium	yes	yes	no	$205	strict
Oregon	strict	medium	no	yes	yes	$320	moderate
Pennsylvania	moderate	medium	no	yes	no	$314	moderate
Rhode Island	lenient	high	no	yes	yes	$389	lenient
South Carolina	strict	low	no	yes	yes	$222	strict
South Dakota	moderate	low	yes	yes	no	$355	strict

TABLE B.1 *(continued)*

State	TANF Policies						
	TANF Time Limits	TANF Earnings Disregards	State Has TANF Diversion Program	Two-Parent Families Eligible for TANF	Restrictions on Two-Parent Family Eligibility for TANF	Average TANF Benefit for Families in Sample	TANF Sanctions
Tennessee	strict	low	no	yes	no	$150	strict
Texas	moderate	low	yes	yes	yes	$157	moderate
Utah	strict	high	yes	yes	yes	$352	strict
Vermont	lenient	medium	no	yes	yes	$443	moderate
Virginia	strict	low	yes	yes	yes	$219	strict
Washington	moderate	high	yes	yes	yes	$375	lenient
West Virginia	moderate	low	yes	yes	yes	$286	moderate
Wisconsin	moderate	low	yes	yes	yes	$628	strict
Wyoming	moderate	low	no	yes	yes	$267	strict

Sources: Average TANF and FSP benefits are calculated as the average value for families in our sample. Benefit amounts are simulated by the TRIM model. FSP recertification period for families with children calculated from FSP Quality Control Data File. All other TANF policy variables are from the Urban Institute's welfare rules database. All other FSP variables are from Mathematica Policy Research's internal FSP Entry and Exit Codebook.

TABLE B.2

STATE FSP POLICY VARIABLES
(Policies as of March 2000)

State	FSP Policies				
	Average FSP Benefit for Families in Sample	State Has Electronic Benefit Transfer System	Food Stamp Reporting Requirements	Average Time to FSP Recertification for Families with Children (Months)	FSP Sanctions
Alabama	$219	yes	monthly	10.6	full
Alaska	$274	yes	less than monthly	11.1	partial
Arizona	$204	yes	monthly	3.9	partial
Arkansas	$191	no	monthly	11.8	partial
California	$154	no	less than monthly	12.7	partial
Colorado	$231	yes	change	5.6	partial
Connecticut	$150	yes	less than monthly	11.3	partial
D.C.	$188	yes	monthly	10.2	partial
Delaware	$244	no	change	6.8	full
Florida	$195	yes	monthly	4.6	full
Georgia	$240	yes	monthly	4.6	full
Hawaii	$290	yes	less than monthly	12.1	partial
Idaho	$233	yes	monthly	5.7	partial
Illinois	$242	yes	monthly	10.4	partial
Indiana	$265	no	monthly	6.6	partial
Iowa	$127	no	monthly	11.3	partial
Kansas	$190	yes	monthly	11.9	full
Kentucky	$138	yes	monthly	6.3	partial
Louisiana	$207	yes	monthly	5.5	full
Maine	$214	no	change	4.5	partial
Maryland	$189	yes	monthly	6.5	partial
Massachusetts	$201	yes	less than monthly	9.0	full
Michigan	$229	no	monthly	8.4	partial
Minnesota	$187	yes	less than monthly	11.9	partial
Mississippi	$219	no	monthly	9.7	partial
Missouri	$192	yes	monthly	4.3	partial
Montana	$245	no	change	11.6	partial
Nebraska	$227	no	monthly	5.1	partial
Nevada	$230	no	monthly	5.4	partial
New Hampshire	$167	yes	monthly	5.3	partial
New Jersey	$182	yes	monthly	8.0	full
New Mexico	$198	yes	monthly	4.1	partial
New York	$170	no	monthly	8.9	partial
North Carolina	$190	yes	monthly	4.9	partial
North Dakota	$273	yes	monthly	7.8	full
Ohio	$229	yes	monthly	5.2	full
Oklahoma	$225	yes	monthly	5.9	full
Oregon	$156	yes	monthly	6.3	partial
Pennsylvania	$208	yes	less than monthly	11.6	partial
Rhode Island	$190	yes	monthly	11.4	partial
South Carolina	$253	yes	monthly	12.0	partial
South Dakota	$173	yes	less than monthly	15.7	full

TABLE B.2 *(continued)*

State	FSP Policies				
	Average FSP Benefit for Families in Sample	State Has Electronic Benefit Transfer System	Food Stamp Reporting Requirements	Average Time to FSP Recertification for Families with Children (Months)	FSP Sanctions
Tennessee	$228	yes	monthly	4.0	partial
Texas	$174	yes	monthly	4.5	full
Utah	$209	yes	monthly	5.1	full
Vermont	$210	yes	monthly	9.7	partial
Virginia	$176	no	change	5.2	full
Washington	$191	yes	monthly	4.5	partial
West Virginia	$214	no	monthly	6.9	partial
Wisconsin	$201	no	monthly	4.2	partial
Wyoming	$197	yes	monthly	3.9	partial

Sources: Average TANF and FSP benefits are calculated as the average value for families in our sample. Benefit amounts are simulated by the TRIM model. FSP recertification period for families with children calculated from FSP Quality Control Data File. All other TANF policy variables are from the Urban Institute's welfare rules database. All other FSP variables are from Mathematica Policy Research's internal FSP Entry and Exit Codebook.

APPENDIX C

TRENDS IN ELIGIBILITY AND PARTICIPATION RATES

TABLE C.1

TRENDS IN TANF ELIGIBILITY RATES, 1996 TO 2000

Households (in Millions)	1996	1997	1998	1999	2000
All[a]					
Number eligible	4.3	4.0	4.0	3.6	3.2
Number low-income	12.9	12.4	12.2	11.7	10.9
Eligibility rate (percent)	33	32	33	31	29
Married-Parent					
Number eligible	0.9	0.9	1.0	0.9	0.8
Number low-income	6.1	5.9	5.8	5.7	5.3
Eligibility rate (percent)	14	15	17	16	15
Single-Parent					
Number eligible	3.1	2.8	2.7	2.4	2.0
Number low-income	6.1	5.8	5.7	5.3	4.9
Eligibility rate (percent)	50	48	47	45	41

Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

[a]Includes cohabiting households.

TABLE C.2

TRENDS IN TANF PARTICIPATION RATES, 1996 TO 2000

Households (in Millions)	1996	1997	1998	1999	2000
All[a]					
Number of participants	3.6	3.0	2.5	2.1	1.8
Number eligible	4.7	4.4	4.5	4.1	3.6
Participation rate	78	68	56	51	50
Married-Parent					
Number of participants	0.6	0.5	0.5	0.4	0.3
Number eligible	0.9	0.9	1.1	1.0	0.9
Participation rate	65	55	45	41	35
Single-Parent					
Number of participants	2.7	2.2	1.8	1.4	1.3
Number eligible	3.3	3.0	3.0	2.6	2.2
Participation rate	81	73	59	54	57

Source: Calculations from data from the Urban Institute's TRIM3 model, conducted by Mathematica Policy Research, Inc.

[a]Includes cohabiting households.

APPENDIX D

COMPARISON OF LINEAR PROBABILITY MODEL AND PROBIT ESTIMATES

TABLE D.1

COMPARISON OF LINEAR PROBABILITY MODEL AND PROBIT ESTIMATES

	TANF Eligibility		TANF Participation		FSP Participation	
	Linear Probability Model	Probit (Marginal Effects)	Linear Probability Model	Probit (Marginal Effects)	Linear Probability Model	Probit (Marginal Effects)
Constant	0.63**		-0.05		-0.13	
	(0.04)		(0.11)		(0.09)	
Family Type						
Single-parent	0.06**	0.10**	0.19**	0.20**	0.18**	0.19**
	(0.02)	(0.02)	(0.04)	(0.04)	(0.03)	(0.03)
Noncitizen	-0.05**	-0.05*	-0.05	-0.06	-0.11**	-0.13**
	(0.02)	(0.02)	(0.04)	(0.04)	(0.03)	(0.03)
Number of People in Unit						
3	0.05**	0.06**	0.08*	0.09+	0.07*	0.08*
	(0.02)	(0.02)	(0.04)	(0.05)	(0.03)	(0.04)
4 or more	0.09**	0.08**	0.12*	0.13*	0.11**	0.13**
	(0.02)	(0.03)	(0.05)	(0.06)	(0.04)	(0.05)
Two or More Units in Household	0.06**	0.07*	-0.25**	-0.22**	-0.07*	-0.05
	(0.02)	(0.03)	(0.04)	(0.04)	(0.03)	(0.04)
Number of Adult Earners in Unit						
1	-0.14**	-0.07*	-0.17**	-0.18**	-0.06*	-0.02
	(0.02)	(0.03)	(0.04)	(0.04)	(0.03)	(0.04)
2 or more	-0.06*	0.07	-0.23**	-0.23**	-0.08+	-0.02
	(0.03)	(0.05)	(0.07)	(0.06)	(0.05)	(0.07)
Other Adults in Household	0.08**	0.13**	0.04	0.04	-0.04	-0.03
	(0.01)	(0.03)	(0.04)	(0.04)	(0.03)	(0.03)
Age of Youngest Child in Unit (Years)						
Younger than 1	0.08**	0.11**	-0.01	-0.03	-0.02	-0.02
	(0.02)	(0.03)	(0.04)	(0.05)	(0.03)	(0.04)
1 to 2	0.07**	0.08**	0.10**	0.12**	0.06*	0.09**
	(0.01)	(0.02)	(0.03)	(0.04)	(0.03)	(0.03)
3 to 5	0.07**	0.09**	-0.03	-0.03	0.03	0.04
	(0.01)	(0.02)	(0.03)	(0.04)	(0.02)	(0.03)
6 to 12	0.06**	0.06**	-0.01	-0.02	0.02	0.04
	(0.01)	(0.02)	(0.04)	(0.04)	(0.03)	(0.03)
Monthly Unit Earnings ($1,000s)	0.15**	0.24**	0.05	0.04	-0.06	-0.12*
	(0.01)	(0.05)	(0.07)	(0.07)	(0.04)	(0.05)
Total Unit Income ($1,000s)	-0.37**	-0.51**	-0.07	-0.06	0.01	-0.01
	(0.02)	(0.04)	(0.06)	(0.06)	(0.04)	(0.05)
Additional Household Income ($1,000s)	-0.00	-0.02	-0.01*	-0.04**	-0.05**	-0.08**
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)

TABLE D.1 *(continued)*

	TANF Eligibility		TANF Participation		FSP Participation	
	Linear Probability Model	Probit (Marginal Effects)	Linear Probability Model	Probit (Marginal Effects)	Linear Probability Model	Probit (Marginal Effects)
Unit Has Nonzero Assets	0.09**	0.13**	0.09*	0.11*	0.12**	0.15**
	(0.01)	(0.02)	(0.04)	(0.05)	(0.03)	(0.04)
Unit's Income Relative to Poverty Level						
100 to 129 percent	-0.22**	-0.13**	0.05	0.06	-0.08**	-0.06
	(0.02)	(0.02)	(0.06)	(0.08)	(0.03)	(0.04)
130 to 149 percent	-0.19**	-0.16**	-0.21**	-0.26**	-0.14**	-0.15*
	(0.02)	(0.02)	(0.08)	(0.08)	(0.05)	(0.07)
150 to 200 percent	-0.09**	-0.13**	0.03	0.02	-0.17**	-0.33**
	(0.02)	(0.03)	(0.09)	(0.12)	(0.04)	(0.05)
Race/Ethnicity						
Hispanic			0.00	0.00	-0.01	-0.01
			(0.04)	(0.05)	(0.03)	(0.03)
Black, non-Hispanic			0.04	0.05	0.08**	0.09*
			(0.04)	(0.04)	(0.03)	(0.03)
Other			0.07	0.08	0.09+	0.09
			(0.06)	(0.07)	(0.05)	(0.06)
Age of Unit Head						
Younger than 25			0.01	0.01	0.06	0.07
			(0.06)	(0.07)	(0.04)	(0.05)
25 to 34			0.05	0.06	0.10**	0.13**
			(0.05)	(0.06)	(0.03)	(0.04)
35 to 44			-0.03	-0.04	0.03	0.04
			(0.05)	(0.05)	(0.03)	(0.04)
Education of Unit Head						
Less than high school			0.24**	0.33**	0.28**	0.37**
			(0.06)	(0.09)	(0.04)	(0.06)
High school diploma or GED			0.20**	0.29**	0.18**	0.25**
			(0.06)	(0.09)	(0.04)	(0.07)
Some college			0.15*	0.23*	0.14**	0.21**
			(0.06)	(0.10)	(0.05)	(0.07)
Central City Residence			0.07+	0.08+	0.02	0.02
			(0.04)	(0.05)	(0.03)	(0.04)
Amount of FSP Benefits Eligible for					0.02	-0.03
					(0.11)	(0.13)
Eligible for TANF					0.04	0.03
					(0.03)	(0.03)
Amount of TANF Benefits Eligible for			0.14	0.17+		
			(0.08)	(0.09)		
Eligible for FSP			0.04	0.03		
			(0.04)	(0.06)		

TABLE D.1 *(continued)*

	TANF Eligibility		TANF Participation		FSP Participation	
	Linear Probability Model	Probit (Marginal Effects)	Linear Probability Model	Probit (Marginal Effects)	Linear Probability Model	Probit (Marginal Effects)
TANF Earnings Disregards						
Moderate	-0.02	-0.03				
	(0.02)	(0.02)				
High	0.05**	0.07**				
	(0.02)	(0.02)				
TANF Time Limit Policies						
Lenient	0.03	0.03	-0.07	-0.08		
	(0.02)	(0.03)	(0.05)	(0.06)		
Moderate	-0.05**	-0.07**	-0.04	-0.05		
	(0.02)	(0.02)	(0.04)	(0.05)		
TANF Diversion Program	0.03+	0.05*	-0.02	-0.02		
	(0.02)	(0.02)	(0.04)	(0.05)		
No Restrictions on Benefits to Two-Parent Families	-0.02	-0.02	-0.05	-0.06		
	(0.02)	(0.02)	(0.04)	(0.05)		
TANF Sanctions Rating						
Lenient			0.01	0.02		
			(0.05)	(0.05)		
Moderate			-0.00	-0.00		
			(0.04)	(0.05)		
State Has Electronic Benefit Transfer System					0.05	0.06
					(0.03)	(0.04)
FSP Average Recertification Period for Families with Children					0.01	0.01
					(0.01)	(0.01)
Required to Report Changes in Income					0.02	0.03
					(0.06)	(0.07)
Monthly Reporting Required					-0.03	-0.03
					(0.04)	(0.05)
Full FSP Sanctions Imposed					0.01	0.01
					(0.03)	(0.04)
State Unemployment Rate More than 6 Percent	0.09**	0.14**	0.13+	0.16+	0.11+	0.14+
	(0.03)	(0.05)	(0.07)	(0.09)	(0.06)	(0.07)
Gross Weekly Wages (Dollars)						
251 to 270	-0.04*	-0.05*	-0.01	-0.01	-0.02	-0.02
	(0.02)	(0.02)	(0.04)	(0.05)	(0.03)	(0.04)
Greater than 270	0.04**	0.07**	0.04	0.05	-0.03	-0.04
	(0.02)	(0.02)	(0.04)	(0.04)	(0.03)	(0.03)

TABLE D.1 *(continued)*

	TANF Eligibility		TANF Participation		FSP Participation	
	Linear Probability Model	Probit (Marginal Effects)	Linear Probability Model	Probit (Marginal Effects)	Linear Probability Model	Probit (Marginal Effects)
State Poverty Rates (Percentages)						
10 to 12.1	-0.02	-0.03	0.05	0.05	0.00	-0.01
	(0.02)	(0.02)	(0.04)	(0.05)	(0.03)	(0.04)
Greater than 12.1	-0.01	-0.03	0.13**	0.15**	0.10**	0.10*
	(0.02)	(0.03)	(0.05)	(0.05)	(0.04)	(0.04)
Percent Metropolitan						
72.4 to 84.8	-0.03+	-0.04+	-0.04	-0.05	-0.00	0.00
	(0.02)	(0.02)	(0.04)	(0.04)	(0.03)	(0.04)
More than 84.8	-0.09**	-0.11**	-0.06	-0.08	-0.02	-0.01
	(0.02)	(0.03)	(0.05)	(0.05)	(0.04)	(0.04)
R-Squared	0.53		0.22		0.22	
Sample Size	**6,166**	**6,166**	**2,135**	**2,135**	**3,577**	**3,577**

Source: CPS, the Urban Institute's TRIM3 Microsimulation model, Blank and Schmidt (2001), welfare rules database, and state economic indicators from the Bureau of Labor Statistics.

Note: Robust standard errors in parentheses. For continuous variables, marginal effects for the probit models are calculated at the means of the variables. For dummy variables, marginal effects represent the effect of a discrete change from zero to one.

+ Significantly different from zero at the .10 level, two-tailed test.
* Significantly different from zero at the .05 level, two-tailed test.
** Significantly different from zero at the .01 level, two-tailed test.