

**OUTCOMES FOR
THE INCOME
MAINTENANCE
CASELOAD
AFTER RECEIPT:
CASELOAD
DYNAMICS,
EMPLOYMENT
AND EARNINGS
IN ILLINOIS
1995–1999**

**Summary and
Full Report**

**Bong Joo Lee
Robert M. Goerge
John Dilts**

July 2001

Chapin Hall Center for Children

The Chapin Hall Center for Children at the University of Chicago was established in 1985 as a research and development center dedicated to bringing sound information, rigorous analyses, innovative ideas, and an independent perspective to the ongoing public debate about the needs of children and the ways in which those needs can best be met.

The Center focuses its work on all children, while devoting special attention to children facing special risks or challenges, such as poverty, abuse and neglect, and mental and physical illness. The contexts in which children are supported—primarily their families and communities—are of particular interest.

Chapin Hall's work is shaped by a dual commitment to the worlds of research and policy. This requires that our work meet both the exacting standards of university research and the practical needs of policy and program development, and that we work to advance knowledge and to disseminate it.

Chapin Hall is committed to diversity not only of race, ethnicity, gender, sexual orientation, and physical ability but also of experience, discipline, and viewpoint.

Chapin Hall's commitment to all children, with special attention to those experiencing or at risk of serious problems, is reflected in the range of the Center's research projects and publications. The following represent the Center's major areas of endeavor:

- Children's services, covering the problems that threaten children and the services designed to address them, including child welfare, mental health, and the juvenile court
- Primary supports, concerning the resources in communities that enhance the development and well-being of all children, but may be especially important to children who are poor or otherwise disadvantaged
- Community building, focusing on the development, documentation, and evaluation of community-building initiatives designed to make communities more supportive of children and families
- Schools' connections with children's services, primary supports, and communities, examining the range of institutions that foster children's learning and development, including not only schools but also families, businesses, services, communities, and the relationships, actual and potential, among them
- International projects, covering Chapin Hall's recent and growing involvement with children's policy researchers and research centers in other countries
- Special activities and consultations, covering a range of projects, often undertaken in collaboration or consultation with other organizations

Discussion Paper CS-65

© 2001 by Chapin Hall Center for Children

A complete list of Chapin Hall publications is available at our Web site, www.chapin.uchicago.edu.

Phone: 773/753-5900 Fax: 773/753-5940

ISSN: 1097-3125

TABLE OF CONTENTS

Summary.....	1
Introduction	3
Data and Methods.....	3
Data.....	3
The Study Population.....	4
Study Design.....	4
Findings from the Descriptive Analysis.....	5
Outcomes at the Time of AFDC/TANF Exit	5
Employment Outcomes After Leaving Cash Assistance	9
Findings from the Multivariate Analysis	9
Exits from AFDC/TANF.....	9
Employment Transitions After AFDC/TANF Exit.....	13
Conclusion	15

Outcomes for the Income Maintenance Caseload After Receipt: Caseload Dynamics, Employment and Earnings in Illinois 1995–1999

*Bong Joo Lee
Robert M. Goerge
John Dilts*

Summary

In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) shifted the focus of the nation's cash assistance program: no longer viewed as an entitlement, this federal legislation mandated work and clear progress toward self-sufficiency. While the outcomes observed during the cash assistance receipt period are an important indicator in gauging the early success of the reform, in order to understand the full effects of welfare reform, one also has to be concerned about whether those individuals who leave the cash assistance program find jobs and are able to support their families. Understanding whether patterns of employment and earnings of those who leave welfare have changed since the implementation of welfare reform is important to establishing the effects of reform on outcomes.

This study expands on our earlier study of the income maintenance caseload outcomes during receipt of cash assistance. This study examines the patterns of employment and earnings of AFDC/TANF recipients in Illinois as they left cash assistance from 1995 through 1999, covering the periods before and after the 1996 Personal Responsibility and Work Opportunity Reconciliation Act. We report on the changes in employment and earnings at the time of cash assistance exit, the long-term employment outcomes among those who leave assistance, and how the employment status at the time of exit relates to long-term employment outcomes.

Further, we attempt to isolate the effects of new policies and programs on the outcome measures while controlling for the characteristics of recipients and the status of economy during the period measured by changes in unemployment rates.

The major findings in this report are:

- Recipients left cash assistance more quickly in the later years of the study, and were more likely to have earnings reported when they left assistance. However, there has been very little change in the levels of earnings among those leaving assistance with a job, indicating that despite the fact that more recipients are leaving with a job, the “level” of job they have has changed very little. In other words, those leaving cash assistance with a job have not seen an improvement in their economic well-being, despite the improvement in the overall economy during the study period.
- The employment status at the time of AFDC/TANF exit is strongly related to the long-term employment outcomes of the former cash assistance recipients. Those who had a job at the time of exit are about 2.5 times more likely to have a job and report about 50 percent higher average earnings after four quarters than those who did not have a job at exit.
- A significant portion of those who had a job at the time of exit lose employment

Acknowledgments

The authors would like to thank Dave Gruenenfelder, John Knight, and Linda Brumleve at the Illinois Department of Human Services, and Bruce Meyer at Northwestern University, for their helpful comments.

over time. For example, by four quarters after exit from cash assistance, about 25 percent of the 1998 exit cohort who had a job at the time of exit didn't have any earnings reported.

- The data suggest that a majority of those who left cash assistance without a job might never be employed. About 65 percent of the 1995 exit cohort who left AFDC/TANF without a job have not had any earnings reported after 4 years.
- Our multivariate analysis results show that decreased duration of cash assistance receipt is due to welfare policy changes, rather than the growing robust economy during the period.
- Although our multivariate analyses show that the improvement in employment outcomes during receipt is largely due to welfare reform, the reform had very little effect on outcomes after the recipients left assistance. Rather, the improving economy is responsible for the modest gain in employment outcomes after receipt.

Taken together with our previous findings, this study suggests that although there has been substantial progress made in helping AFDC/TANF recipients make the transition from welfare to work during cash assistance receipt (evidenced by shorter assistance duration, longer duration to reentry, shorter duration to first earnings, and increased earnings during receipt), the improvement in employment outcomes after the recipients leave assistance has been quite modest.

Although fewer individuals are returning to cash assistance, a large and relatively stable proportion of former recipients are not working. In addition, those who are working after leaving AFDC/TANF are employed at low earnings levels. The data indicate that it takes on average about a year to have earned income close to the federal poverty line for a family of three (\$13,880 in 1999) even for those who had a job at the time of exit and stayed employed for a year.

The findings of this study suggest the need for increased employment support services after recipients leave the TANF program.

Full Report

INTRODUCTION

Through the 5-year lifetime limit on receiving Temporary Assistance for Needy Families (TANF) support and the strong work requirement, welfare reform highlights the importance of moving welfare recipients into gainful employment. With regard to self-sufficiency, employment, and earnings of families while they are receiving cash assistance in Illinois, the outcomes of the reform have been positive. Our earlier study of the employment experiences of Illinois families receiving cash assistance showed that more families were leaving the program, fewer were returning once they leave, and that while receiving cash assistance, their earnings were higher and occurring sooner after entry into the cash assistance program than in previous years.¹

The reform in welfare was underway in many states before the Personal Responsibility and Work Reconciliation Act was signed into law in August 1996 and fully implemented by July 1997. In Illinois, a program called Work Pays, implemented in November 1993, allows AFDC recipients who are employed to keep a sizable portion of their cash assistance grant. Under Work Pays, employed recipients have their grant reduced by only \$1 for every \$3 earned. This *income disregard*, in effect, encourages work by welfare recipients by ensuring continued cash assistance while they make the transition to work.² This formula applies until earnings reach 3 times the maximum payment level for a given family size. An equally important provision of Work Pays began with the implementation of TANF in 1997: the clock measuring a recipient's progress toward the 5-year lifetime limit stops if recipients work at least 30 hours per week (up from 20 hours as of October 1999). As long as TANF recipients in Illinois work 30 hours a week or are enrolled in a full-time postsecondary degree program, time limits are suspended.

Although the outcomes of the active cash assistance caseload are an important indicator, it is also necessary to know whether those individuals who leave the program find jobs and are able to support their

families in order to gauge the early success of welfare reform. Understanding whether patterns of employment and earnings of those who leave welfare have changed since the implementation of welfare reform is critical in assessing its impact.

This study focuses on the experiences of Illinois families as they leave cash assistance. We examine the patterns of employment and earnings of AFDC/TANF recipients who left cash assistance between 1995 and 1999, a period that begins before and continues after implementation of PRWORA. We report on the changes in employment status and earnings at the time of cash assistance exit, the long-term employment outcomes among those who leave assistance, and how employment status at the time of exit relates to the long-term employment outcomes. Further, we attempt to isolate the effects of new policies and programs on these outcome measures while controlling for the characteristics of recipients and the status of economy during the period measured by changes in local unemployment rates.

DATA AND METHODS

Data

The primary data are drawn from the Integrated Database on Children's Services in Illinois (IDB). The IDB is a state-level, longitudinal database constructed from administrative data gathered by public agencies that serve children and families in Illinois.³ Specifically, we use individual-level longitudinal service records that were constructed from AFDC/TANF receipt data from the Illinois Department of Human Services Client Database. In order to track employment and earnings patterns of the population, we use information on quarterly wages of all Illinois employees reported by employers to the Department of Employment Security for unemployment insurance (UI) purposes.⁴ By linking these two datasets at the individual level, we were able to describe the changes in cash assistance status and employment changes of the population over time.

In order to characterize the status of the economy at a given point in time during the study period, we use the county-level monthly unemployment rate calculated by the Illinois Department of Employment Security.⁵

The Study Population

We define our study population in two different ways: entry cohorts and exit cohorts. In order to examine the patterns of exit from cash assistance with and without employment, we define our entry cohort population as all heads of families (“grantees”) who entered cash assistance programs between 1995 and 1999. For the study of long-term employment outcomes after receipt, we use the exit cohort population. We selected five cohorts of grantees who left cash assistance programs during the same period.⁶

Study Design

It is important to note that the reliability of the estimated impact of welfare policy reforms depends on access to data on the characteristics and outcomes of the recipients both prior to and during the new programs. The IDB is an ideal database for such a study design because it stores longitudinal data covering a sufficiently long period both prior to the beginning of new programs and during program operation.

The overall effect of policies and programs on the key outcome measures depends on several distinct factors: the characteristics of AFDC/TANF recipients, local job market conditions, and the relative effectiveness of the new policies and programs. The major challenge of this study is to develop an analytic model that can be used to isolate the effect of new policies and programs on the outcome measures while controlling for the characteristics of recipients and employment opportunities.

We employ proportional hazards modeling to examine the effects of time of entry to AFDC/TANF on the duration of receipt of assistance. Entry-cohort variables representing the year of first entrance to AFDC/TANF are defined as a set of four dummy variables, using 1995 as the contrast year. Similarly, exit-cohort variables represent the year of exit from AFDC/TANF in the exit cohort analysis examining the employment duration after leaving cash assistance.

Transitions such as leaving welfare with or without employment and getting or losing a job depend on recipients’ demographic and socioeconomic characteristics, such as region of residence and race. Controlling for such influences when determining the effect of poli-

cies is critical. Therefore, in addition to using entry and exit dates as proxies for policy effects, we also examine the effect of recipient characteristics on the likelihood of making a transition. The covariates describing the individual’s characteristics include age at the time of AFDC/TANF entry and/or exit, and race/ethnicity. We also examine the effects of the unemployment rate and of living in a major metropolitan area (Cook County) on the likelihood of making a transition.

Recipient age at the time of AFDC/TANF entry or exit, depending on the particular analysis, was divided into five categories: age 17 and under, 18–19, 20–24, 25–29, and 30 and over. Race and ethnicity were coded as non-Hispanic white, African American, Hispanic, and other. Region was classified as either Cook County or rest of state. With the division between Cook County and “rest of state,” we capture urban and rural differences in a gross manner. The unemployment rate variable is defined as a time-varying covariate, taking the value of the county-level unemployment rate in a given quarter. This variable reflects the status of the local economy as measured by the unemployment rate.

For the transitions of leaving welfare, we use a competing risks hazard model to show how AFDC/TANF entry year, characteristics of recipients, and unemployment rate affect the likelihood of making two different transitions. These transitions are exit from AFDC/TANF with employment, and exit without employment.

In order to examine employment outcomes after cash assistance exit, we divide those who leave AFDC/TANF into two groups: those leaving with employment and those leaving without employment. For the individuals who were not employed at exit, the dependent variable is the duration to the first employment after the exit. For those who were employed at exit, the dependent variable is the duration of employment from exit. Using proportional hazards models, we show how AFDC/TANF exit year, characteristics of recipients, and the unemployment rate affect the likelihood of acquiring a job after exit when the former recipient was not employed at the time of exit. Similarly, for those who were employed at exit, we estimate the likelihood of “losing” employment after exit.

FINDINGS FROM THE DESCRIPTIVE ANALYSIS

Outcomes at the Time of AFDC/TANF Exit

The key research questions we examine are the following:

- What is the employment status of AFDC/TANF recipients when they leave assistance?
- Has the employment status of those who have left AFDC/TANF changed over time in Illinois?
- What is the average reported earnings of those who leave AFDC/TANF at the time of exit from receipt?

In order to provide answers to those research questions, we followed all AFDC/TANF entrants from 1995 to 1999 to examine their cash assistance exit patterns and their employment status at the time they left the program. Consistent with our earlier findings, we find a steady decline in duration of cash assistance receipt during the period. Table 1 shows that the proportion of grantees leaving cash assistance within a year (4 quarters) increased about 20 percent, from 59 percent of the 1995 entry cohort to 72 percent of the 1998 entry cohort. The later cohorts not only have shorter spells receiving cash assistance, but are also more likely to leave assistance with earnings. Among the 1995 entry cohort, about 44 percent of those leaving assistance within a year reported earn-

Table 1

Patterns of AFDC/TANF Exit with Earnings Reported Among Grantees Who Entered AFDC/TANF Between 1995 and 1999 in Illinois

Year of Entry to AFDC/TANF	Number of New Entries to AFDC/TANF	Exit from AFDC/TANF Within					
		2 Quarters	4 Quarters	8 Quarters	12 Quarters	16 Quarters	20 Quarters
Percent Leaving AFDC/TANF							
1995	51,397	34.2	58.5	80.6	89.8	95.5	97.4
1996	46,955	38.9	66.2	84.8	93.9	96.4	
1997	43,709	36.9	63.1	87.6	93.0		
1998	33,303	45.8	71.5	85.4			
1999	19,466	36.4	45.9				
Percent Leaving with Earnings							
1995	51,397	14.3	25.4	37.2	42.6	45.9	47.1
1996	46,955	17.1	30.9	41.9	47.0	48.6	
1997	43,709	18.0	31.9	45.2	48.6		
1998	33,303	22.6	36.6	44.9			
1999	19,466	19.0	24.7				
Percent of All Exits with Earnings							
1995		41.7	43.5	46.2	47.4	48.1	48.4
1996		43.9	46.7	49.4	50.1	50.4	
1997		48.8	50.6	51.6	52.2		
1998		49.3	51.2	52.6			
1999		52.2	53.8				
Average Exit Quarter Earnings of Those Leaving with Earnings (\$)							
1995		1,978	2,394	2,381	2,374	2,306	2,448
1996		2,003	2,262	2,310	2,193	2,357	
1997		1,966	2,299	2,237	2,207		
1998		1,960	2,122	2,244			
1999		1,944	2,289				

Note: Shaded areas represent partially censored observations, meaning that all of the entries had not yet reached the associated time point. The reported earnings are in 1999 dollars.

ings in the quarter they left assistance. For the 1998 entry cohort, the proportion was about 51 percent, representing about a 16 percent increase from 1995 (see Table 1).

When we examine the duration of AFDC/TANF receipt and the likelihood of having earned income at the time of cash assistance exit, we find that those who stayed longer on AFDC/TANF are more likely to have earnings reported at the time of exit. For example, Table 1 shows that among the 1995 entry cohort, about 44 percent of those leaving within a year had a job at the time of AFDC/TANF exit, and about 48 percent of those leaving within 4 years did so.

Although the proportion of those leaving AFDC/TANF with a job increased during the period, there has been very little

change in the level of earnings reported over the study period, suggesting that employment has not improved the economic well-being of former cash assistance recipients.⁷ For example, the average earnings of those leaving cash assistance within a year were consistently about \$2,300 during the period (see Table 1).

Tables 1a and 1b show patterns of AFDC/TANF exit with earnings in Cook County and in the balance of the state. These tables show that, in both regions, recipients are leaving AFDC/TANF more quickly and are more likely to have a job when they leave. At the same time, the level of earnings changed very little. Although these overall trends mimic the state total picture, there are some key differences between Cook

Table 1 a

Patterns of AFDC/TANF Exit with Earnings Reported Among Grantees Who Entered AFDC/TANF Between 1995 and 1999 in Cook County

Year of Entry to AFDC/TANF	Number of New Entries to AFDC/TANF	Exit from AFDC/TANF Within					
		2 Quarters	4 Quarters	8 Quarters	12 Quarters	16 Quarters	20 Quarters
Percent Leaving AFDC/TANF							
1995	25,898	30.0	53.4	76.9	86.8	93.7	96.1
1996	23,716	31.5	60.0	80.3	91.4	94.6	
1997	22,106	27.7	53.9	83.2	89.6		
1998	18,572	39.5	65.2	80.2			
1999	12,853	30.9	40.0				
Percent Leaving with Earnings							
1995	25,898	11.2	21.2	33.3	38.7	42.6	44.0
1996	23,716	12.7	26.2	37.8	43.5	45.4	
1997	22,106	12.8	26.1	41.2	45.1		
1998	18,572	18.7	32.0	40.8			
1999	12,853	15.8	21.2				
Percent of All Exits with Earnings							
1995		37.3	39.6	43.3	44.6	45.5	45.8
1996		40.4	43.6	47.0	47.6	48.1	
1997		46.2	48.5	49.5	50.4		
1998		47.2	49.2	50.9			
1999		51.1	53.0				
Average Exit Quarter Earnings of Those Leaving with Earnings (\$)							
1995		2,432	2,656	2,695	2,692	2,677	2,679
1996		2,538	2,609	2,613	2,579	2,574	
1997		2,527	2,630	2,593	2,577		
1998		2,381	2,420	2,439			
1999		2,275	2,358				

Note: Shaded areas represent partially censored observations, meaning that all of the entries had not yet reached the associated time point. The reported earnings are in 1999 dollars.

Table 1 b

Patterns of AFDC/TANF Exit with Earnings Reported Among Grantees Who Entered AFDC/TANF Between 1995 and 1999 in the Balance of the State

Year of Entry to AFDC/TANF	Number of New Entries to AFDC/TANF	Exit from AFDC/TANF Within					
		2 Quarters	4 Quarters	8 Quarters	12 Quarters	16 Quarters	20 Quarters
Percent Leaving AFDC/TANF							
1995	25,499	38.5	63.7	84.3	92.9	97.3	98.8
1996	23,239	46.5	72.5	89.5	96.5	98.3	
1997	21,603	46.2	72.6	92.2	96.5		
1998	14,731	53.8	79.6	92.0			
1999	6,613	47.0	57.3				
Percent Leaving with Earnings							
1995	25,499	17.4	29.8	41.3	46.5	49.4	50.4
1996	23,239	21.6	35.7	46.1	50.6	51.8	
1997	21,603	23.4	38.0	49.6	52.3		
1998	14,731	27.7	42.6	50.4			
1999	8,547	19.7	24.6				
Percent of All Exits with Earnings							
1995		45.3	46.8	49.0	50.1	50.8	51.0
1996		46.4	49.3	51.5	52.5	52.7	
1997		50.5	52.3	53.8	54.2		
1998		51.6	53.6	54.8			
1999		41.8	42.9				
Average Exit Quarter Earnings of Those Leaving with Earnings (\$)							
1995		1,682	1,803	1,850	1,873	1,881	1,884
1996		1,682	1,752	1,798	1,814	1,824	
1997		1,650	1,744	1,768	1,775		
1998		1,601	1,642	1,677			
1999		1,545	1,588				

Note: Shaded areas represent partially censored observations, meaning that all of the entries had not yet reached the associated time point. The reported earnings are in 1999 dollars.

County and the rest of the state. First, the recipients in the balance of the state are leaving AFDC/TANF more quickly, and a higher proportion of those leaving in the balance of the state have earnings at the time of cash assistance exit compared to those of Cook County. Second, although the overall employment rate at the time of exit is lower in Cook County, the average earnings of those employed are substantially higher than those in the balance of the state.

In our previous study, we found that just as the recipients are leaving AFDC/TANF more quickly, they are also more likely to stay off assistance once they leave. Table 2 shows the patterns of employment after cash assistance receipt. Sixty-seven percent of the 1995 entry cohort were off assistance by the

fourth quarter of 1997. For the 1997 entry cohort, 82 percent were off assistance by the fourth quarter of 1999. There has been a small increase in employment among those who stayed off assistance over time. Among the 1996 entrants who were off assistance by the fourth quarter of 1997, about 53 percent were employed. For the 1997 entrants, the corresponding figure was 54 percent. We find very little change in earnings across the entry cohorts. In Illinois, the average quarterly earnings of the 1995 entry cohort who were off assistance in the fourth quarter of 1996 were \$3,382. As a comparison, the average earnings of the 1998 entry cohort who were off assistance in the fourth quarter of 1999 were \$3,418, indicating very little change from the 1996 entry cohort (see Table 2).

Table 2

Patterns of Employment After Cash Assistance Receipt Among Grantees Who Entered AFDC/TANF Between 1995 and 1999 in Illinois

Year of Entry to AFDC/TANF	Number of New Entries to AFDC/TANF	1995 4th Quarter	1996 4th Quarter	1997 4th Quarter	1998 4th Quarter	1999 4th Quarter
Illinois, Total						
Percent Remaining Off AFDC/TANF						
1995	51,397	20.9	52.6	66.5	78.0	87.7
1996	46,955		22.7	57.9	74.5	86.2
1997	43,709			21.8	63.4	82.0
1998	33,303				31.2	71.8
1999	19,466					27.3
Percent with Earnings Among Those Remaining Off						
1995		47.5	49.1	52.9	52.7	53.4
1996			47.3	53.4	53.6	53.9
1997				53.7	54.4	55.1
1998					55.4	56.5
1999						58.4
Average Earnings of Those Employed (\$)						
1995		3,114	3,382	3,759	4,034	4,187
1996			3,095	3,523	3,782	3,971
1997				3,175	3,461	3,648
1998					3,158	3,418
1999						3,309
Cook County						
Percent Remaining Off AFDC/TANF						
1995	25,898	17.2	46.0	60.0	71.0	81.8
1996	23,716		18.0	50.2	66.3	79.2
1997	22,106			16.2	53.3	73.6
1998	18,572				22.9	62.3
1999	12,853					22.4
Percent with Earnings among Those Remaining Off						
1995		44.8	48.3	53.4	53.9	54.5
1996			45.0	54.1	54.6	54.8
1997				52.3	54.0	55.2
1998					55.1	56.9
1999						57.7
Average Earnings of Those Employed (\$)						
1995		3,731	4,004	4,381	4,665	4,819
1996			3,627	4,091	4,397	4,556
1997				3,865	4,120	4,289
1998					3,885	3,999
1999						3,811
Balance of State						
Percent Remaining Off AFDC/TANF						
1995	25,499	24.7	59.3	73.1	85.1	93.7
1996	23,239		27.6	65.7	83.0	93.4
1997	21,603			27.4	73.7	90.6
1998	14,731				41.6	83.7
1999	6,613					36.9
Percent with Earnings Among Those Remaining Off						
1995		49.5	49.7	52.5	51.7	52.4
1996			48.8	52.9	52.8	53.2
1997				54.6	54.7	55.0
1998					55.6	56.1
1999						59.4
Average Earnings of Those Employed (\$)						
1995		2,719	2,906	3,231	3,478	3,605
1996			2,769	3,070	3,265	3,451
1997				2,774	2,980	3,114
1998					2,659	2,864
1999						2,735

Note: Shaded areas represent partially censored observations, meaning that all of the entries had not yet reached the associated time point. The reported earnings are in 1999 dollars.

In contrast, however, the level of earnings among the former AFDC/TANF recipients within each entry cohort increased steadily among those who stayed off assistance (see Table 2). This is true for Cook County as well as for the balance of the state—except that the average earnings were higher among the former recipients employed in Cook County.

Employment Outcomes After Leaving Cash Assistance

In this section, we examine the long-term employment outcomes of those who leave AFDC/TANF. We are especially interested in how the employment status at the time of AFDC/TANF exit is related to long-term employment outcomes.

According to Table 3, there has been steady improvement in employment rates across all exit cohorts in Illinois. The proportion of those who left AFDC/TANF who had earnings within four quarters of exit increased about 17 percent, from 47 percent of the 1995 exit cohort to 55 percent of the 1997 exit cohort.

When the employment outcomes of the exit cohorts are examined over time, we find that the rate of employment within each exit cohort changed very little over time. For example, 47 percent of the 1995 exit cohort (which provides the longest observation period for our study) who remained off cash assistance after sixteen quarters had reported earnings, representing almost no change from the 46.7 percent after two quarters.

Although the rate of employment changed very little over time among those who remain off cash assistance after exit from AFDC/TANF, the average earnings among those who are employed increased by about \$400 each year.⁸

The employment status at the time of AFDC/TANF exit is strongly related to the long-term employment outcomes of the those who leave. Those who had a job at the time of exit are about 2.5 times more likely to have a job and report about 50 percent higher average earnings after four quarters than those who did not have a job at exit (see Table 4).

A significant portion of those who had a job at the time of exit lose employment over time. For example, by four quarters after exit, about 25 percent of the 1998 exit cohort who had a job at the time of exit reported no

earnings. The data further suggest that a majority of those who left without a job might never be employed. About 65 percent of the 1995 exit cohort who left AFDC/TANF without a job did not have any earnings reported after 4 years.

FINDINGS FROM THE MULTIVARIATE ANALYSIS

Exits from AFDC/TANF

The steady decline in the duration of cash assistance across entry cohorts found in the descriptive analysis was mirrored in the results of multivariate analyses. Table 5 shows that the 1996–1999 entry cohorts were all more likely than the 1995 entry cohort to exit from AFDC/TANF, and the effect was larger with each successive cohort up to the 1998 cohort. When only the entry cohort and the unemployment rate were entered in the model, higher levels of unemployment appeared to be associated with an increased likelihood of exit, a counter-intuitive finding. This points to the likely importance of entry dynamics in relation to the unemployment rate, in that entrance into receipt when unemployment is low may be associated with individual characteristics that are related to reduced likelihood of exit. The fact that the unemployment coefficient becomes statistically insignificant when the region is entered suggests that individuals with poor human capital may be concentrated in Cook County. Cook County residence was consistently associated with reduced likelihood of exit relative to the rest of the state, again corroborating the results of the descriptive analysis. This finding persisted when race and age at entry were included in the model, indicating that there may be important differences in measures of human capital across regions of the state, or that practices in local offices may vary, or both.

The final model in Table 5 shows that while there is a strong cohort effect even after the other factors are controlled for in the model, the unemployment rate itself is not significantly associated with the likelihood of exit from TANF/AFDC. The finding of no statistically significant effects of unemployment rate predicting the likelihood of exit from AFDC/TANF during the period in contrast to the consistently significant effects of entry cohort suggest that the short-

Table 3

Patterns of Employment and Earnings Among Those Who Left AFDC/TANF Between 1995 and 1999 in Illinois

Year of Exit	Number of Those Who Left AFDC/TANF	Quarters After Exit				
		2 Quarters	4 Quarters	8 Quarters	12 Quarters	16 Quarters
Illinois, Total						
		Percent Remaining Off AFDC/TANF				
1995	112,964	73.7	60.9	52.1	48.4	47.1
1996	112,954	75.5	63.2	54.8	52.6	
1997	103,110	76.7	65.6	60.4		
1998	105,281	79.7	72.5			
1999	77,751	47.7				
		Percent with Earnings Among Those Remaining Off				
1995		46.7	47.1	47.9	47.3	47.0
1996		50.5	51.7	51.0	50.5	
1997		55.5	55.3	54.0		
1998		55.0	55.1			
1999		56.2				
		Average Earnings of Those Employed (\$)				
1995		2,954	3,293	3,726	4,141	4,430
1996		2,925	3,325	3,855	4,167	
1997		2,968	3,325	3,729		
1998		2,901	3,176			
1999		2,894				
Cook County						
		Percent Remaining Off AFDC/TANF				
1995	63,616	69.6	57.0	48.7	45.0	43.6
1996	61,760	71.8	60.3	52.2	49.7	
1997	56,008	73.1	62.3	56.7		
1998	62,568	74.1	65.7			
1999	51,732	44.3				
		Percent with Earnings Among Those Remaining Off				
1995		43.8	44.8	46.3	46.4	46.1
1996		48.6	50.5	50.6	50.2	
1997		55.0	54.9	54.1		
1998		53.3	53.9			
1999		54.6				
		Average Earnings of Those Employed (\$)				
1995		3,371	3,735	4,200	4,671	5,046
1996		3,358	3,775	4,328	4,738	
1997		3,348	3,757	4,256		
1998		3,318	3,682			
1999		3,246				
Balance of State						
		Percent Remaining Off AFDC/TANF				
1995	49,348	79.1	65.8	56.5	52.7	51.6
1996	51,194	80.1	66.7	58.0	56.2	
1997	47,102	81.0	69.4	64.9		
1998	42,713	87.9	82.5	00.0		
1999	26,019	54.3		00.0		
		Percent with Earnings Among Those Remaining Off				
1995		50.0	49.6	49.7	48.4	48.0
1996		52.6	53.1	51.4	50.8	
1997		56.1	55.7	53.9		
1998		57.1	56.6			
1999		58.9				
		Average Earnings of Those Employed (\$)				
1995		2,581	2,899	3,272	3,616	3,849
1996		2,525	2,890	3,380	3,622	
1997		2,592	2,898	3,230		
1998		2,453	2,661			
1999		2,410				

Note: Shaded areas represent partially censored observations, meaning that all of the entries had not yet reached the associated time point. The reported earnings are in 1999 dollars.

Table 4**Patterns of Employment and Earnings Among Those Who Left AFDC/TANF by Exit Employment Status**

Year of Exit	Number of Those Who Left AFDC/TANF	Quarters After Exit				
		2 Quarters	4 Quarters	8 Quarters	12 Quarters	16 Quarters
All Those Who Left						
		Percent Employed				
1995	112,964	43.9	43.8	46.7	48.3	49.7
1996	112,954	47.1	48.0	49.4	50.9	
1997	103,110	52.2	51.7	52.9		
1998	105,281	52.4	52.7			
1999	77,751	31.8				
		Average Earnings of Those Employed (\$)				
1995		2,692	2,831	3,088	3,396	3,659
1996		2,688	2,890	3,211	3,491	
1997		2,728	2,914	3,222		
1998		2,716	2,907			
1999		2,733				
Those Who Left with Earnings in Exit Quarter						
		Percent Employed				
1995	49,924	76.5	71.6	70.3	69.2	68.4
1996	52,355	78.6	74.9	71.5	70.3	
1997	53,555	79.1	74.5	71.8		
1998	55,291	77.8	74.2			
1999	43,012	43.5				
		Average Earnings of Those Employed (\$)				
1995		3,015	3,176	3,475	3,816	4,125
1996		2,999	3,242	3,605	3,932	
1997		3,006	3,214	3,551		
1998		2,986	3,198			
1999		3,041				
Those Who Left Without Earnings in Exit Quarter						
		Percent Employed				
1995	63,040	18.1	21.9	28.1	31.7	34.8
1996	60,599	19.9	24.8	30.3	34.0	
1997	49,555	23.1	27.0	32.5		
1998	49,990	24.3	29.0			
1999	34,739	17.3				
		Average Earnings of Those Employed (\$)				
1995		1,615	1,935	2,323	2,672	2,932
1996		1,624	1,972	2,406	2,705	
1997		1,697	2,018	2,435		
1998		1,762	2,083			
1999		1,778				

Note: Shaded areas represent partially censored observations, meaning that all of the entries had not yet reached the associated time point. The reported earnings are in 1999 dollars.

ened duration of welfare receipt observed during the reform period may be attributed to the changes in policy and programs implemented by the Illinois Department of Human Services rather than the improved economy (as measured by declines in the unemployment rate) during the period.

Next, we analyze the exit patterns of those who are leaving cash assistance with employment and those who are leaving without employment at the time of exit. The results for those leaving assistance with employment are reported in Table 6. The likelihood of exiting AFDC/TANF with employment increased

Table 5

Estimated Conditional Risk Ratios: Exit from AFDC/TANF, Entry Cohorts 1995–1999 in Illinois

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Entry to TANF					
1995	1.00	1.00	1.00	1.00	1.00
1996	1.24 ^a	1.30 ^a	1.27 ^a	1.27 ^a	1.29 ^a
1997	1.28 ^a	1.48 ^a	1.33 ^a	1.34 ^a	1.37 ^a
1998	1.57 ^a	1.95 ^a	1.65 ^a	1.67 ^a	1.72 ^a
1999	1.41 ^a	1.76 ^a	1.53 ^a	1.57 ^a	1.63 ^a
Unemployment Rate^b					
		1.18 ^a	1.01	1.00	1.00
Region					
Balance of State			1.00	1.00	1.00
Cook County			0.70 ^a	0.70 ^a	0.77 ^a
Age					
17 and Under				0.86 ^a	0.88
18–19				0.74 ^a	0.76 ^a
20–24				0.95	0.94
25–29				1.00	1.00
30+				1.08 ^a	1.07 ^a
Race/Ethnicity					
White					1.00
African American					0.78 ^a
Hispanic					0.98
Other					0.90
-2 Log Likelihood	144,622.91	144,530.06	144,335.70	144,176.09	144,073.24
df	4	5	6	10	13

Note: Baseline levels are indicated as a risk ratio of 1.00.

^a Estimates are statistically significant at the 0.05 level.

^b Unemployment rate is specified as a time-varying covariate.

for each cohort from 1996 to 1998 and stayed at the 1998 level in 1999. Again, while all cohorts showed a greater likelihood of exiting with employment relative to the 1995 cohort, the effect was larger for the 1998 and 1999 cohorts. These results are consistent with earlier findings indicating that welfare reform practices instituted in Illinois prior to the 1997 implementation of federally mandated welfare reform were successful in achieving the objective of encouraging employment during receipt, thus increasing the likelihood of employment at the time of exit.⁹ Higher levels of unemployment were associated with a reduced likelihood of exiting with employment, as was residence in Cook County. These effects persisted when race and age were included in the model.

When exits without employment were examined, we found that cohort effects were much the same as those for exits from AFDC/TANF with employment: all cohorts showed an increased likelihood of exit relative to 1995, and the 1998 and 1999 cohorts showed a stronger effect than the earlier cohorts (see Table 7). Higher levels of unemployment were associated with a slightly increased probability of exit without employment. Although residence in Cook County was initially associated with a reduced likelihood of exit without employment, perhaps reflecting a reduced likelihood of any exit for Cook County recipients, this effect was not significant when race was included in the model.

When taken together with the findings of the descriptive analysis, the results pre-

Table 6

Estimated Conditional Risk Ratios: Exits from AFDC/TANF with Employment

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Entry to TANF					
1995	1.00	1.00	1.00	1.00	1.00
1996	1.26 ^a	1.33 ^a	1.27 ^a	1.27 ^a	1.29 ^a
1997	1.35 ^a	1.57 ^a	1.35 ^a	1.36 ^a	1.38 ^a
1998	1.76 ^a	2.19 ^a	1.73 ^a	1.75 ^a	1.79 ^a
1999	1.65 ^a	2.06 ^a	1.70 ^a	1.74 ^a	1.79 ^a
Unemployment Rate^b		1.18 ^a	0.95	0.94 ^a	0.94 ^a
Region					
Balance of State			1.00	1.00	1.00
Cook County			0.61 ^a	0.61 ^a	0.65 ^a
Age					
17 and Under				0.64 ^a	0.65 ^a
18–19				0.71 ^a	0.72 ^a
20–24				0.95	0.94
25–29				1.00	1.00
30+				0.97	0.96
Race/Ethnicity					
White					1.00
African American					0.83 ^a
Hispanic					1.00
Other					0.79
–2 Log Likelihood	74,550.65	74,502.40	74,307.79	74,225.71	74,195.65
df	4	5	6	10	13

Note: Baseline levels are indicated as a risk ratio of 1.00.

^a Estimates are statistically significant at the 0.05 level.

^b Unemployment rate is specified as a time-varying covariate.

sented in Tables 5–7 point to several conclusions regarding the relative importance of the policies and practices implemented as a result of state and federal welfare reform efforts and economic factors in understanding AFDC/TANF exit dynamics over the 1995–1999 period. The state of the labor market does not appear to have significantly influenced the trend toward decreased duration of cash assistance receipt, suggesting that welfare reform has been the dominant factor. Because cohort effects were seen across all the years analyzed, it appears that both federal welfare reform and policies implemented prior to it, such as Work Pays, played a role. Also, changes in other policies that might have changed welfare recipients' incentive to work, such as expansion

of the Earned Income Tax Credit (EITC) during the period might have played a significant role.¹⁰ At the same time, changes resulting from federal welfare reform appear to have been responsible for increasing the likelihood that those leaving AFDC/TANF are doing so while employed, thus positioning them more favorably with regard to long-term employment outcomes.

Employment Transitions After AFDC/TANF Exit

The descriptive analysis discussed above showed that the longer-term employment outcomes of former AFDC/TANF recipients have improved across successive exit cohorts from 1995 to 1999. When the duration to first employment after exit among individuals who

Table 7

Estimated Conditional Risk Ratios: Exits from AFDC/TANF Without Employment

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Entry to TANF					
1995	1.00	1.00	1.00	1.00	1.00
1996	1.19 ^a	1.24 ^a	1.22 ^a	1.23 ^a	1.25 ^a
1997	1.18 ^a	1.33 ^a	1.27 ^a	1.27 ^a	1.30 ^a
1998	1.31 ^a	1.58 ^a	1.46 ^a	1.48 ^a	1.53 ^a
1999	1.16	1.40 ^a	1.31 ^a	1.34 ^a	1.40 ^a
Unemployment Rate^b		1.16 ^a	1.07	1.07 ^a	1.07 ^a
Region					
Balance of State			1.00	1.00	1.00
Cook County			0.85 ^a	0.84 ^a	0.95
Age					
17 and Under				1.16	1.18
18–19				0.81 ^a	0.83 ^a
20–24				0.95	0.95
25–29				1.00	1.00
30+				1.20 ^a	1.19 ^a
Race/Ethnicity					
White					1.00
African American					0.75 ^a
Hispanic					0.96
Other					1.02
-2 Log Likelihood	71,128.41	71,094.83	71,075.09	70,983.70	70,915.75
df	4	5	6	10	13

Note: Baseline levels are indicated as a risk ratio of 1.00.

^a Estimates are statistically significant at the 0.05 level.

^b Unemployment rate is specified as a time-varying covariate.

were not employed at exit is modeled solely as a function of exit cohort (see Table 8, Model 1), this finding appears to be substantiated. However, when the unemployment rate and residence in Cook County are controlled for, the exit cohort effect becomes not statistically significant for all cohorts except 1999. Unemployment rate and residence in Cook County are both associated with a significant reduction in the likelihood of transition from unemployment to employment among those who left assistance without a job. These effects are consistent, even when age and race are controlled for. At the same time, exit from AFDC/TANF receipt in 1999 is associated with decreased duration to first employment relative to those exiting in 1995, even when economic and other factors are controlled for.

When the employment duration among individuals who were employed at exit from AFDC/TANF is modeled, the importance of labor market demand as measured by the unemployment rate is apparent again (see Table 9). Higher levels of unemployment were consistently associated with shorter employment duration, even when other factors are controlled for. When analyzed in conjunction with the unemployment rate, no exit cohort effect was found.

The findings on employment outcomes after cash assistance presented in Tables 8 and 9 suggest that the relationship between post-receipt employment outcomes and policy changes associated with federal welfare reform is complex. In general, we find statistically insignificant effects of exit cohort

Table 8

Estimated Conditional Risk Ratios: Transition to Employment for Individuals Not Employed at AFDC/TANF Exit

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Entry to TANF					
1995	1.00	1.00	1.00	1.00	1.00
1996	1.05	1.06	0.98	0.98	0.99
1997	1.14 ^a	1.16 ^a	0.97	0.99	1.00
1998	1.23 ^a	1.27 ^a	1.01	1.05	1.06
1999	1.58 ^a	1.63 ^a	1.32 ^a	1.34 ^a	1.35 ^a
Unemployment Rate^b					
		1.03	0.83 ^a	0.83 ^a	0.83 ^a
Region					
Balance of State			1.00	1.00	1.00
Cook County			0.67 ^a	0.69 ^a	0.71 ^a
Age					
17 and Under				1.15	1.17
18–19				1.39 ^a	1.39 ^a
20–24				1.27 ^a	1.26 ^a
25–29				1.00	1.00
30+				0.79 ^a	0.79 ^a
Race/Ethnicity					
White					1.00
African American					0.98
Hispanic					1.02
Other					0.46 ^a
-2 Log Likelihood	44,933.94	44,933.46	44,855.71	44,719.38	44,700.61
df	4	5	6	10	13

Note: Baseline levels are indicated as a risk ratio of 1.00.

^a Estimates are statistically significant at the 0.05 level.

^b Unemployment rate is specified as a time-varying covariate.

variables with consistent large, significant effects of the unemployment rate measure. These findings suggest that welfare reform policies and program changes had very little to do with post-receipt changes in employment for those who left welfare during the period, rather, that these outcomes were influenced by the state of the labor market and by the region of residence.

CONCLUSION

Taken together with our previous findings on the outcomes during receipt, the findings of this study suggest that although there has been substantial progress in helping AFDC/TANF recipients make the transition from welfare to work during cash assistance receipt (evidenced by shorter assistance dura-

tion, longer duration to reentry, shorter duration to first earnings, and increased earnings during receipt), the improvement in employment outcomes after the recipients leave assistance has been quite modest. Although fewer individuals are returning to cash assistance, a large and relatively stable proportion of these former recipients is not working. In addition, those who are working after leaving AFDC/TANF are employed at low earnings levels. The data indicate that it takes on average about one year to have earned income close to the federal poverty line for a family of three (\$13,880 in 1999), even for those who had a job at the time of exit and stayed employed for a year.

Our multivariate analyses show that the improvement in employment outcomes dur-

Table 9

Estimated Conditional Risk Ratios: Transition to Zero Earnings for Individuals Employed at AFDC/TANF Exit

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Entry to TANF					
1995	1.00	1.00	1.00	1.00	1.00
1996	0.94	0.99	0.97	0.98	0.98
1997	0.87 ^a	0.97	0.93	0.94	0.94
1998	0.96	1.12	1.07	1.07	1.08
1999	0.91	1.08	1.03	1.03	1.04
Unemployment Rate^b		1.14 ^a	1.09 ^a	1.09 ^a	1.09 ^a
Region					
Balance of State			1.00	1.00	1.00
Cook County			0.92	0.92	0.93
Age					
17 and Under				1.17	1.17
18–19				1.32 ^a	1.32 ^a
20–24				1.06	1.06
25–29				1.00	1.00
30+				0.97	0.97
Race/Ethnicity					
White					1.00
African American					0.95
Hispanic					1.08
Other					0.86
-2 Log Likelihood	43,392.59	43,376.37	43,372.83	43,344.66	43,339.95
df	4	5	6	10	13

Note: Baseline levels are indicated as a risk ratio of 1.00.

^a Estimates are statistically significant at the 0.05 level.

^b Unemployment rate is specified as a time-varying covariate.

ing receipt is largely due to welfare reform. However, as expected, the reform had very little effect on outcomes after the recipients left assistance. Rather, the improving econ-

omy is responsible for the modest gain in employment outcomes after receipt.

The findings of this study suggest the need for increased employment support services after TANF receipt has ended.

ENDNOTES

- ¹ Lee, B. J., Goerge, R. M., & Dilts, J. (2000). *Outcomes for the Income Maintenance Caseload During Receipt: Caseload Dynamics, Employment and Earnings in Illinois 1991–1999*. Chicago: Chapin Hall Center for Children at the University of Chicago.
- ² Other researchers find that expansion of the Earned Income Tax Credit (EITC) during the 1990s, along with changes in welfare programs, increased the incentive for single mothers to work. For, example, Meyer and Rosenbaum found that the EITC was responsible for more than 60 percent of the increase in work among single mothers at the national level between 1984 and 1996 using the Current Population Survey data. See Meyer, B. & Rosenbaum, D. T. (Forthcoming 2001). Welfare, the earned income tax credit, and the labor supply of single mothers. *Quarterly Journal of Economics*.
- ³ Goerge, R. M., Van Voorhis, J., & Lee, B. J. (1994). Illinois's longitudinal and relational child and family research database. *Social Science Computer Review*, 12 (3), 351-65.
- ⁴ UI earnings records are not available for out-of-state earnings. It is generally known that more than 90 percent of a state's employed population is covered in the database. Major types of employment that are not covered include self-employment, federal government civilian and military employees, employees of some philanthropic and religious organizations, and independent contractors. For a detailed description of advantages and limitations of using the UI earnings data, see Hotz, J. V. & J. K. Scholz (1999). Measuring employment outcomes and income with administrative and survey data. Paper presented at the Workshop on Data Collection on Low-Income and Welfare Populations, December 16-17, 1999, Panel on Data Methods for Measuring the Effect of Changes in Social Welfare Programs, Committee on National Statistics, National Research Council.
- ⁵ The data are based on the Local Area Unemployment Statistics developed by the Illinois Department of Employment Security. The data were obtained from the IDES's Web site, <http://lmi.ides.state.il.us/>.
- ⁶ By definition, those in the five exit cohorts (1995–1999) could have entered AFDC/TANF at any point in time before 1999. As long as they left assistance during the period, we include them in our exit cohorts.
- ⁷ The reported earnings are adjusted to 1999 dollars by the Consumer Price Index.
- ⁸ The increases in the earnings could be due to either increases in wage rates or increases in number of hours working. Because the wage reports data only contain the total earnings in a quarter without number of hours worked, we are not able to ascertain the reason for the earnings increase.
- ⁹ Lee, B. J., Goerge, R. M., & Dilts, J. (2000). *Outcomes for the Income Maintenance Caseload During Receipt: Caseload Dynamics, Employment and Earnings in Illinois 1991–1999*. Chicago: Chapin Hall Center for Children at the University of Chicago.
- ¹⁰ See Meyer, B. & Rosenbaum, D. T. (Forthcoming 2001). Welfare, the earned income tax credit, and the labor supply of single mothers. *Quarterly Journal of Economics*.

AUTHORS

Bong Joo Lee, Ph.D., is a Research Fellow at Chapin Hall Center for Children and holds an appointment as a University of Chicago Research Associate (Assistant Professor). Dr. Lee also is a Research Affiliate at the Northwestern/University of Chicago Joint Center for Poverty Research. He holds a Ph.D. in social policy from the University of Chicago and has held an Assistant Professorship at Boston University School of Social Work.

Dr. Lee is a nationally recognized expert at designing, building, and analyzing databases built from state agency administrative data systems across the entire spectrum of child and family services. His research focuses on the use of administrative data from human service agencies for the analysis of social policy.

Dr. Lee's research interests include the statistical modeling of the patterns of human service use, issues of child poverty, and demography of children and families. His methodological interests include event-history and hierarchical methods. His recent work includes using multivariate methods to examine the effects of early childbearing and neighborhood poverty on abuse and neglect of children, examination of food stamp and WIC utilization patterns before and after welfare reform, and a study of employment outcomes of welfare reform. Currently, he directs a three-state child care subsidy study funded by the Administration for Children, Youth and Families.

Robert M. Goerge, Ph.D., is Associate Director and a Research Fellow at Chapin Hall Center for Children. Dr. Goerge's research interests center on the experiences of children and families in the social service system. Central to these interests is improving the available information on all children

and families, particularly those who are abused or neglected, disabled, poor, require mental health services, or otherwise come to the attention of service providers.

Dr. Goerge is the Principal Investigator of the Integrated Database on Child and Family Services in Illinois, a longitudinal database on child and adult social program participation. He is also Co-Principal Investigator of the Illinois Family Study, a 6-year panel study of welfare reform in Illinois. He has recently co-authored *Outcomes for the Income Maintenance Caseload During Receipt: Caseload Dynamics, Employment and Earnings in Illinois 1991–1999*, "Changes in Child Social Program Participation in the 1990s: Initial Findings from Illinois," and *The State of the Child in Illinois: 2000*. He was a member of the National Research Council's Panel on Improving Data Collection and Methods for Evaluating Welfare Reform. He is also currently the Principal Investigator of a project funded by U.S. DHHS on analyzing the effect of welfare reform on children.

Dr. Goerge holds an appointment as a Research Associate at the University of Chicago and is a Research Associate at the Northwestern University/University of Chicago Joint Center for Poverty Research.

John Dilts is a Research Associate at the Chapin Hall Center for Children, where he provides analytic and data processing support for a range of projects. His research interests focus on forecasting models and small area estimation techniques for social and economic indicators. Mr. Dilts previously held the position of Planning Associate at the City Colleges of Chicago, where he was involved in strategic planning and institutional research. He holds an M.P.P. from the University of Chicago, where he also pursued doctoral studies in sociology.

RELATED PUBLICATIONS

The publications listed below are available from Chapin Hall except where another publisher is indicated.

“The Patterns of Food Stamp and WIC Participation and Their Effects on Health of Low-Income Children”

Bong Joo Lee, Lucy Mackey-Bilaver, Robert M. Goerge 2000

Northwestern University/University of Chicago Joint Center for Poverty Research Working Paper, No. 129.

“The Dynamics of AFDC, Medicaid, and Food Stamps: A Preliminary Report”

Mairead Reidy, Lucy Mackey Bilaver, Robert M. Goerge, Yizu Yeh, Bong Joo Lee 1998

Northwestern University/University of Chicago Joint Center for Poverty Research Working Paper, October 1988 No. 4

“Dynamics of Children’s Movement Among the AFDC, Medicaid, and Foster Care Programs Prior to Welfare Reform: 1995–1996”

Robert M. Goerge, Bong Joo Lee, Mairead Reidy, Lucy Mackey Bilaver, Barbara Needell, Alan Brookhart, Seon Lee, Esther Kang, Michael Armijo, Dean Duncan, Lynn Usher 2000

[On-line]. Available: <http://aspe.os.dhhs.gov/hsp/movement00/index.htm>

“Poverty, Early Childbearing, and Child Maltreatment”

Bong Joo Lee, Robert M. Goerge 1999

Children and Youth Services Review, Vol.21, Nos. 9/10

An Update from the Multistate Foster Care Data Archive: Foster Care Dynamics 1983–1998

Fred Wulczyn, Kristen Brunner Hislop, Robert M. Goerge

“The Patterns of Food Stamp and WIC Participation under Welfare Reform”

Bong Joo Lee, Lucy Mackey-Bilaver and Robert Goerge (Accepted for publication)

Children and Youth Services Review

“Matching and Cleaning Administrative Data”

Robert Goerge and Bong Joo Lee 2001

Data Collection and Research Issues for Studies of Welfare Populations

Panel on Data and Methods for Measuring the Effects of Changes in Social Welfare Programs. C.F. Citro, R. Moffit, and M. Ver Ploeg, (eds). Committee on National Statistics. Washington, DC: National Academy Press.

“Children in Poverty”

Bong Joo Lee and Michael Weir 2000

In *The State of the Child, Illinois: 2000*, Robert M. Goerge and Bong Joo Lee, (eds)

Outcomes for the Income Maintenance Caseload During Receipt: Caseload Dynamics, Employment and Earnings in Illinois 1991–1999

Bong Joo Lee, Robert Goerge, John Dilts 2000

“Changes in Child Social Program Participation in the 1990s: Initial Findings from Illinois.”

Robert Goerge, Bong Joo Lee 2000

Northwestern University/University of Chicago Joint Center for Poverty Research Working Paper, No. 199. [On-line]. Available:

(<http://www.jcpr.org/publications.html>)