A REPORT OF THE NCCP CHILD CARE RESEARCH PARTNERSHIP

A Study of Regulated Child Care Supply in Illinois and Maryland

Ann Collins Jiali Li

NCCP CHILD CARE RESEARCH PARTNERSHIP MEMBERS

National Center for Children in Poverty Illinois Department of Human Services Illinois Network of Child Care Resource and Referral Agencies Maryland Committee for Children, Inc. Maryland Department of Human Services, Child Care Administration



National Center for Children in Poverty

NATIONAL CENTER FOR CHILDREN IN POVERTY (NCCP) was established in 1989 at the School of Public Health, Columbia University, with core support from the Ford Foundation and the Carnegie Corporation of New York. The Center's mission is to identify and promote strategies that reduce the number of young children living in poverty in the United States, and that improve the life chances of the millions of children under age six who are growing up poor.

The Center:

- ► Alerts the public to demographic statistics about child poverty and to the scientific research on the serious impact of poverty on young children, their families, and their communities.
- Designs and conducts field-based studies to identify programs, policies, and practices that work best for young children and their families living in poverty.
- ► Disseminates information about early childhood care and education, child health, and family and community support to government officials, private organizations, and child advocates, and provides a state and local perspective on relevant national issues.
- Brings together public and private groups to assess the efficacy of current and potential strategies to lower the young child poverty rate and to improve the well-being of young children in poverty, their families, and their communities.
- ► Challenges policymakers and opinion leaders to help ameliorate the adverse consequences of poverty on young children.

A Study of Regulated Child Care Supply in Illinois and Maryland

by Ann Collins and Jiali Li

Ann Collins, researcher in early care and education, is senior staff associate, NCCP and the coordinator of the Child Care Research Partnership. She has a background in policy-relevant research and advocacy at the Child Care Action Campaign. In addition to initiating research on child care, including informal care, she has helped craft NCCP's activities around welfare reform and young children.

Jiali Li held the prestigious Bernard Berelson Award for Population and Demographic Studies at the Population Council before joining NCCP as associate research scientist. Her work includes both basic and applied social demography with a focus on child poverty. Her data analyses informed the findings in NCCP's recent reports: One in Four: America's Youngest Poor and Map and Track: State Initiatives to Encourage Responsible Fatherhood.

A preliminary discussion draft of this paper was released in February 1997. Since that time, substantial additional analyses have been conducted. The findings from this paper supersede those in the earlier version.

Copyright © 1997 by the National Center for Children in Poverty

Copies of this report are available prepaid for \$5.00 from the National Center for Children in Poverty, Columbia School of Public Health, Attn: Publications, 154 Haven Avenue, New York, NY 10032; Tel: (212) 304-7100; Fax: (212) 544-4200 or 544-4201. Checks should be made payable to Columbia University.

TABLE OF CONTENTS

Introduction	6
The State Child Care Policy Context	8
Licensing and Regulation	8
State Subsidy Systems	8
State-Sponsored Prekindergarten Programs	9
Research Questions	10
Methodology	11
Data Sources and Data Elements	11
Level of Analyses	12
The Analysis	13
Limitations of the Approach	14
Findings	15
Socioeconomic Differences	15
Poverty and Near Poverty Rates	15
Female Labor Force Participation Rates	17
Size of Regulated Child Care Supply	19
Statewide	19
Center Care	19
Regulated Family Child Care	19
Head Start	20
Prekindergarten	21
Distribution of Regulated Child Care	21
Supply and Rates of Female Labor Force Participation	21
Supply and Near Poverty Rates	23
Supply of Regulated Care for Extended Hours and Non-Traditional Hours	26
Extended Hours	c 26
Non-Traditional Work Schedules	20 26
Relationship Between Price and Socioeconomic Characteristics	20
Price and Female Labor Force Participation Rates	27
Price and Near Poverty Rate	28
Conclusions	29
Endnotes	
Diblication by	21

List of Figures and Tables

Figure 1: Poverty Statistics for Children Under Age Six: Maryland and Illinois, 1990–1994	16
Figure 2: Percentage of Zip Codes by Percentage of Individuals in Near Poverty	16
Figure 3: Percentage of Children Under Age 13 Living in Zip Codes with Differing Near Poverty Rates	17
Figure 4: Percentage of Zip Codes by Percentage of Women in the Labor Force with Children Under Age Six	18
Figure 5: Percentage of Children Under Age 13 Living in Zip Codes with Differing Percentages of Women in the Labor Force with Children Under Age Six	18
Figure 6: Regulated Child Care Slots per 1,000 Children Under Age 13	19
Figure 7: Regulated Child Care Slots per 1,000 Children Under Age 13: Center Care and Regulated Family Care	20
Figure 8: Regulated Child Care Slots per 1,000 Population Under Age 13 by Percentage of Females in Labor Force with Children Under Age Six	22
Figure 9: Regulated Family Child Care Slots per 1,000 Population Under Age 13 by Percentage of Females in Labor Force with Children Under Age Six	22
Figure 10: Center-based Child Care Slots per 1,000 Population Under Age 13 by Percentage of Females in Labor Force with Children Under Age Six	23
Figure 11: Regulated Child Care Slots per 1,000 Population Under Age 13 by Percentage of Individuals in Near Poverty	24
Figure 12: Regulated Family Child Care Slots per 1,000 Population Under Age 13 by Percentage of Individuals in Near Poverty	25
Figure 13: Center-based Child Care Slots per 1,000 Population Under Age 13 by Percentage of Individuals in Near Poverty	25
Figure 14: Ratios of Median Weekly Full-Time Regulated Child Care Price for Children Ages Birth to Two for Different Levels of Female Labor Force Participation to the Price in Communities with Lowest Participation	27
Figure 15: Ratios of Median Weekly Full-Time Regulated Child Care Price for Children Ages Three to Five for Different Levels of Female Labor Force Participation to the Price in Communities with Lowest Participation	27
Figure 16: Ratios of Median Weekly Full-Time Regulated Child Care Price for Children Ages Birth to Two for Different Levels of Near Poverty to the Price in Least Poor Communities	28
Figure 17: Ratios of Median Weekly Full-Time Regulated Child Care Price for Children Ages Three to Five for Different Levels of Near Poverty to the Price in Least Poor Communities	28
Table 1: Child Care Resource and Referral Data Sources	11
Table 2: Definitions of Types of Child Care in Illinois and Maryland	12

ACKNOWLEDGMENTS

 ${
m T}$ his paper is the first product of the Child Care Research Partnership, supported by the Child Care Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.

It would not have been possible without other members of the NCCP Research Team: Neil Bennett, J. Lawrence Aber, Stephanie Jones, and Jane Knitzer. Contributions were also made by Janet Singerman and Sandy Skolnik at the Maryland Committee for Children, Inc., Barbara Tayman at the Maryland Department of Human Services, Child Care Administration, Brazilian Thurman at the Illinois Network of Child Care Resource and Referral Agencies, Michele Piel and Elizabeth Smith at the Illinois Department of Public Aid, and J. Lee Kreader at the Illinois Department of Children and Family Services. Appreciation also goes to Telly Valdellon, who designed the layout and rendered the graphs and charts for this report, and to the other members of NCCP's publication team.

The research partners would like to give special thanks to Barbara Amendola of Amendola & Associates, and to the Maryland Committee for Children, for help in obtaining and interpreting the data.

INTRODUCTION

The debate over welfare reform during the last several years was marked with widespread agreement that successful efforts to move families from welfare into the workforce—and to prevent low-income families from needing welfare in the first place—are predicated on there being adequate child care arrangements so parents can balance successfully the demands of work and family, and children can have opportunities for healthy growth and development.¹ The policy ramifications of this recognized fact are very significant, but there are many unanswered questions about the exact nature of adequate child care and the necessary policies to ensure that families get such care. These questions relate to both the ways in which child care subsidies are structured and the ways by which new and existing child care supply is stimulated and strengthened.

One of the factors that hampers policy decisions is that local child care markets, particularly those used by low-income families, are not well understood. Policymakers and researchers have long recognized that there is great local variation in supply,² and low-income families, therefore, face very different ranges of options and prices depending upon where they live. Child care policymakers hold the potential to be most effective when they consider differences in local markets and community contexts as they attempt to strengthen child care supply and to provide subsidies to low-income parents.

Recognizing the need to increase the understanding of low-income child care markets, the effects of different child care policies, and the differences policies can make in enabling parents to work and children to receive child care that prepares them for school, the Child Care Bureau of the U.S. Department of Health and Human Services, Administration for Children and Families, funded three child care research partnerships. The partnerships developed research projects on child care for low-income families using existing data from administrative systems. These partnerships are comprised of university-based researchers, child care research end care subsidies. This report is the first in a series from one of these three research partnerships, which is directed by the National Center for Children in Poverty of Columbia School of Public Health, in collaboration with agencies in Maryland and Illinois.³

For this report, the partnership compared the distribution of regulated child care within and between Maryland and Illinois. By "regulated," we mean all center-based care and all regulated family child care in the two states. We linked census data with child care supply data available from the Illinois and Maryland statewide child care resource and referral networks.⁴ Our goals were twofold: (1) to see if some of the basic socioeconomic differences among communities within each state and between the states are related to differences in patterns of regulated child care supply; and (2) to describe how the supply and prices of regulated care vary by different community characteristics.⁵

It is vital to underscore the fact that this report is only describing one portion of the child care market—those child care centers and family child care homes that are regulated by a state agency (e.g., the state child care licensing entity, the state department of education) and/or, by the federal government (such as Head Start). We have sufficient information about parents' preferences and use of care to know that unregulated care, including some family child care, underground care,⁶ in-home care, and relative care are all very important aspects of child care supply.⁷ We suspect that the availability and prices related to unregulated parts of the child care. However, we have no state-specific data on the supply of such care, and we are therefore unable to incorporate it into our analyses to date.

Also important to underscore is that the goal of this paper is to describe differences between and within the states clearly and simply. The information we use only relates regulated supply to a limited number of socioeconomic factors. Existing research and practitioner knowledge indicate that child care supply responds to a very complex economic system.⁸ Therefore, we must caution readers to understand that although this paper describes the patterns of regulated child care very simply, it does not suggest that policy solutions to enable low-income families to obtain adequate child care can be developed simplistically. In the next part of our research project, we will link geographic information from the subsidy systems in the two states with the child care supply and census data we used for this report and will do further analyses to shed additional light on potential policy solutions.

These two major caveats are important—that we are describing only part of the child care market and that many of the direct policy implications can be made only when there are additional analyses. At the same time, we believe that this report is an important first step in understanding how child care supply and prices vary by basic community characteristics. Further work will be done by this research partnership to enable us to develop a more sophisticated understanding of factors that relate to differences in regulated child care supply.

THE STATE CHILD CARE POLICY CONTEXT

Knowledge of some basic differences in child care regulatory policies, subsidy systems, and prekindergarten programs between Maryland and Illinois is essential to begin to understand some of the comparisons that are made in this study. However, it is premature to attribute any difference in regulated child care supply to these policy differences before significant further analyses. There are several differences that are very important.

Differences in licensing and regulation between the two states make it impossible to identify parallel universes of family child care. In Maryland, the only unregulated forms of child care are in-home care, relative care, and care provided for a child for a fee for less than 20 hours per month. All other family child care is subject to state regulations, and all care that is regulated is in the child care resource and referral (CCR&R) data base. In contrast, Illinois does not regulate in-home care, relative care, and family child care homes with three or fewer children, including the caregiver's own. Therefore, the smaller legal family child care homesthose with three children or fewer-are by and large unidentified in Illinois CCR&R data. This is a significant difference between the two states in the data presented in this paper. In addition, research partners in both states hold the common belief that relative care is a very significant part of the child care market for all families, and particularly for low-income families, based on other information available to them. No information on such care is available to us for the study at this time.

State Subsidy Systems

Licensing and

Regulation

Maryland and Illinois also have somewhat different child care subsidy systems. Both states have significant investments in child care subsidies.⁹ In 1995, Maryland spent \$32.7 million of state funding. When combined with federal funding, the total funding for subsidies was \$64.6 million, serving a total of 23,460 children in that year. In 1996, Illinois spent \$95.5 million of state and local funding on subsidies. The combined total of federal, state, and local funding for that year was \$222.5 million, serving an average monthly total of 94,708 children.

In Maryland, all child care subsidies are in the form of vouchers, available to parents through local departments of social services and administered by the Child Care Administration of the Department of Human Resources. In Illinois, the subsidy structure is more complicated. Approximately 62 percent of funding available for child care subsidies is provided through vouchers and the remaining 38 percent through contract agreements directly with child care programs. At the present time, the preponderance of the former is administered through the Department of Public Aid and all of the latter are administered through the Department of Children and Family Services.¹⁰ Family eligibility and co-payment levels for the subsidy programs and payment rates to providers differ between the two states.

The implications of these policy differences are unclear at this time. However, further work by the research partners will begin to factor in the effects of the level of subsidy investments in different communities.

State-Sponsored Prekindergarten Programs

Neither state's prekindergarten program is specifically for low-income children, although Maryland targets low-income *schools* and Illinois targets *children* at risk of school failure (as determined by participating schools, which can—but may not—include children from low-income families). Illinois funds prekindergarten services for children between ages three and five. In 1997, the state will spend \$112 million for 35,000 children. Maryland's Extended Elementary Education Program is located in school districts that are eligible for federal Title 1 funding. All four-year-olds in these school districts are eligible for the program. The program serves 8,180 children in all 24 school districts, with a budget of approximately \$11.6 million in fiscal year 1997.

RESEARCH QUESTIONS

Four basic research questions guide this report:

- ► How does the ratio of slots of center-based care and regulated family child care to children vary by neighborhood characteristics, specifically by the variation in the percentage of individuals with incomes below 185 percent of the federal poverty line or the percentage of women in the labor force with children under age six?
- What proportion of center-based supply is composed of Head Start and prekindergarten slots in each state and how do these proportions compare?
- ► How do the hours of regulated child care match the working hours of low-income parents whose jobs require work for extended hours, work during the night, and work on weekends?
- ► How do median prices for regulated child care vary by the neighborhood characteristics listed in the first research question?

We believe that the answers to these questions can be helpful in developing a useful way to show basic patterns of regulated child care supply.

METHODOLOGY

Data Sources and Data Elements

Table 1: Child Care Resource and Referral Data Sources T he methodology for this project was very straightforward. In this section we present information on the following issues: sources of data and definitions of data elements, the unit/level of analyses, the analytical approach, and the limitations of the approach.

For data on child care supply, we used data from the statewide child care resource and referral data bases in Maryland (*LOCATE: Child CareSM*) and Illinois (*CareFinder*®), for April 1996. Table 1 describes these data bases in more detail. We extracted information on all licensed family child care and center-based care, as well as all center-based care in Illinois considered to be "license-exempt."¹¹ In April, there were 15,776 regulated family child care and center-based programs in Maryland's CCR&R data base and 13,240 such programs in the Illinois CCR&R data base.¹²

MARYLAND

LOCATE: Child CareSM is the CCR&R software and data base system owned by the Maryland Committee for Children, Inc., and used by the Maryland Child Care Resource Network. It includes information on all regulated child care and early education programs in the state. Our analysis used April 1996 information on 12,914 family child care providers and 2,843 group programs (full-day center-based care, Head Start programs, nursery schools, school-age programs, part-day programs, kindergartens, infant centers, camps). LOCATE: Child CareSM also includes intake information on families who call CCR&Rs and request help finding child care.

ILLINOIS

CareFinder[®] is the CCR&R software and data system owned by the agencies of the Illinois Child Care Resource and Referral System. Our analysis used April 1996 information on 8,665 family child care homes and 4,394 centers. Centers in the data base include full-day center-based care, Head Start programs, nursery schools, school-age programs, part-day programs, kindergartens, infant centers, and camps. CareFinder[®] also includes intake information on families who call CCR&Rs and request help finding child care.

Please see Table 2 for definitions of the data elements we used in *CareFinder®* and *LOCATE: Child CareSM*. It is worth highlighting again here that differences in state regulations (described in further detail in the previous section) mean that regulated family child care is very different in the two states. In addition, we used data from the 1990 census, which we obtained both by zip code and by census tract, for each of these states. We linked these data by zip code with the regulated child care programs in both states.

Table 2: Definitions of Types of Child Care in Illinois and Maryland

	Center-Based Care	Regulated Family Child Care
MARYLAND	All licensed care that takes place in child care centers and large group homes, infant programs, Head Start programs, nursery schools, state-sponsored prekin- dergarten programs, other part- day programs, camp and sum- mer programs. The analysis does not include license-exempt cen- ter care, which only are programs located on federal government premises and programs that of- fer temporary care while parents are on the premises.	Care for a child younger than 13 (or to a developmentally disabled person younger than 21) in place of parental care for less than 24 hours a day, in a residence other than a child's own, for a fee. All care that is provided to an unre- lated child for a fee for at least 20 hours per month is regulated. Regulated family child care homes can care for up to eight children.
ILLINOIS	All licensed and license-exempt care that takes place in child care centers, infant programs, Head Start programs, nursery schools, state prekindergarten, other part- day programs, camp and sum- mer programs. Specifically, Illi- nois license-exempt programs in this analysis are those in CareFinder® serving children ages three or older that are oper- ated by public or private schools, institutions of higher learning or other accredited institutions; that are located on federal govern- ment premises; that care for no individual child for no more than 10 hours per week and are oper- ated by a church or social ser- vice agency; that offer short-term special activities and are operated by civic, charitable, and govern- ment organizations; and that of- fer temporary care while parents are on the premises.	Care for a child under 12 in the caregiver's home. All providers serving four or more children, in- cluding the caregiver's own chil- dren, are required to be licensed. Licensed family child caregivers may serve up to eight children (plus four more school-age chil- dren with a part-time assistant). Licensed group child care provid- ers may serve up to 12 children with a full-time assistant (plus four more school-age children with a part-time assistant).

Level of Analyses

We used zip code areas as the unit of geographic measurement, rather than census tract areas. The child care programs, therefore, were linked with census data by zip code for each of the 370 zip codes in Maryland and 937 in Illinois. We decided that zip codes rather than census tracts were more likely to capture child care markets. We concluded that census tracts were too small to capture the full picture of demand and supply. For example, in some tracts there was no regulated supply. In others, capacity for care for children of a certain age sometimes greatly exceeded the number of children that age living in the same census tract, which indicated to us that a significant number of families use child care outside the census tracts in which they reside. Two other factors guided our decision: (1) since our focus was statewide, a zip code-level analysis was the more manageable of the two options; and (2) we wanted to have a comparable unit of analysis between this report and the next, which will link subsidy data with CCR&R and census data, and we were able only to obtain zip code information from the subsidy systems to protect confidentiality.

The Analysis

After considering a number of neighborhood characteristics likely to relate to patterns of child care supply, we decided to describe distinctions among communities based on the number of individuals living within 185 percent of the federal poverty line (hereby referred to as "near poverty"). We used the near poverty rate instead of the poverty rate because it more closely approximated federal eligibility guidelines for child care subsidies. In 1994, a family of three with an income at or below \$21,869 lived in poverty or near poverty. We also considered the proportion of females in the labor force with children under age six. In addition, we based the analysis on the proportion of children under age 13 living in each zip code. We did this for two reasons: (1) eligibility for child care subsidies in both states is primarily for children up to age 12; and (2) it is not possible, from the available data, to estimate accurately the supply of child care by children's age. Therefore a comparison of the number of children under age six to the number of child care slots would be misleading.

After computing frequency distributions for these variables within zip codes in the two states, we roughly divided the zip codes into four groups for each of the two variables. We then developed several descriptions based on the combination of the near poverty rate and the female labor force participation rate. Finally, using 1990 census data, we determined where children under age 13 lived based on these joint frequency distributions.

Next we conducted a number of cross tabulations to develop descriptions of the patterns of care across zip codes with different levels of near poverty and female labor force participation. Data from the cross tabulations are the basis of our findings. Data presented here are expressed in terms of slots per 1,000 children ages birth to 13. Several exceptions are noted in the text and in the explanations for the figures.

We also computed median prices for the regulated child care in Illinois and Maryland. Because of different methods of data collection, we computed median prices per program for Maryland and per slot in Illinois. Ultimately, price weighted per child care slot is the more accurate measure, but since family child care is very flexible in terms of the age composition of the children in care, the precise number of slots is difficult to determine. For family child care providers, Illinois CCR&R data includes the number of slots by child's age that providers report they customarily serve. In Maryland, where anecdotal evidence indicates that there is a glut of regulated family child care, the belief is that such information would not reflect accurately the true capacity in the state at this time. However, despite the difference in data collection practices between the two states, our analysis indicated that trends in prices were very similar when we computed them by program and by slot in Illinois. Thus, we felt justified in using the program as the unit of analysis to facilitate cross-state comparisons.

We used ratios instead of specific prices when reporting out the variations in median price, setting the unit at 1.00 for those zip codes with either the lowest level of near poverty or female labor force participation. Every price is then expressed in relationship to the first price. For example, in Figure 15, Illinois' full-time weekly price for children ages three to five for zip codes with more than 75 percent female labor force participation is 27 percent lower (the ratio is .73) than the price in zip codes with the lowest female labor force participation. As another example in that same figure, we see that the median price in Maryland zip codes with 65 to 74.9 percent females in the labor force is 11 percent higher (the ratio is 1.11) than the price in communities with low female labor force participation.

There are several limitations to interpreting the data that are important to understand. First, CCR&R data are the richest source available regarding regulated child care supply. However, the very nature of unregulated care dictates that information on such care is not included in CCR&R data. This means that a major portion of the child care market significantly used by low-income families—unregulated child care—is left out of the study. In Maryland, this includes relative care and family child care homes caring for unrelated children for a fee for fewer than 20 hours per month. In Illinois, this includes relative care and family child care homes caring for three or fewer children including the caregiver's own. We plan to address issues related to license-exempt child care through new research later in the project.

Secondly, it is difficult to draw specific conclusions from direct comparisons between the two states because subsidy policy and state regulations (particularly for the latter for family child care) are different.

Third, the CCR&R data from April 1996 are linked with census data from 1990. However, the fact that the rates of female labor force participation and near poverty in 1990 are likely to be highly correlated with the corresponding rates in 1996 means that this should not present a problem.

Finally, as mentioned before, zip codes are an imperfect way to define communities or describe child care markets. However, as we noted, the alternative option—using census tract data—is perhaps even more flawed for our purposes.

Limitations of the Approach

FINDINGS

T he major findings of this paper present patterns of child care supply and price in Illinois and Maryland across the different zip codes that vary by socioeconomic characteristics. In addition, our findings relate to:

- Socioeconomic differences among zip codes in both states;
- Size of the regulated child care supply;
- Near poverty rates and labor force participation rates for women with young children;
- The supply of regulated child care operating for extended or non-traditional hours; and
- ► The relationship between child care price changes and the rates of near poverty and female labor force participation with young children.

Socioeconomic Differences

The research partners found that a basic description of the socioeconomic differences among zip codes was a helpful starting point for assessing current child care policies. Such differences, specifically those related to the percentage of individuals who are poor or near poor, the level of geographic concentration of these individuals, and the female labor force participation rate, are all important to consider when making decisions about child care policies. For instance, the proportion of children living in communities with low female labor force participation and high poverty is important to know when identifying areas where child care demand is likely to change greatly if welfare-related initiatives succeed in moving mothers on cash assistance into the workforce.

Poverty and Near Poverty Rates

Statewide numbers of children in poverty. Figure 1 shows that a greater proportion of children in Illinois are living in low-income families. In the five-year period starting in 1991, an average of 26 percent of Illinois children lived in homes with incomes below the federal poverty line or threshold (\$11,821 for a family of three in 1994), compared to 17 percent of Maryland children. In that same period, the extreme poverty rate (the percentage of young children living in homes with incomes below half the poverty line) in Illinois (15 percent) was more than twice that in Maryland (7 percent).

Distribution of sip codes. As shown in Figure 2, a greater proportion of zip codes in Illinois have relatively high percentages of individuals living in near poverty than in Maryland. In nearly one-third of the zip codes in Illinois (307 of 937), 30 percent or more individuals lived in near poverty. By contrast, in Maryland, only 17 percent of zip codes (64 of 370) had

similar concentrations of poverty. Thirty-eight percent (355 of 937) of zip codes in Illinois contained fewer than 20 percent of individuals living in near poverty, compared to 63 percent (233 of 370) in Maryland.



Figure 1: Poverty Statistics for Children Under Age Six: Maryland and Illinois, 1990–1994

Figure 2: Percentage of Zip Codes by Percentage of Individuals in Near Poverty



Where children live. A much higher proportion of Illinois children live in the poorest zip codes than the proportion of Maryland children living in similar zip codes. Figure 3 shows that in Illinois, 36 percent of children under age 13 (762,000 of 2.1 million) live in zip codes with 30 percent or more individuals living in near poverty, compared to 16 percent of Maryland children under age 13 (136,000 of 864,000). By contrast, 46 percent of Illinois children under 13 (969,000 of 2.1 million) live in zip codes with fewer than 20 percent in near poverty, whereas 68 percent of Maryland children (583,000 of 864,000) live in similar zip codes.



Figure 3: Percentage of Children Under Age 13 Living in Zip Codes with Differing Near Poverty Rates

Female Labor Force Participation Rates

Distribution of sip codes. Maryland has a higher proportion of zip codes where there is relatively high female labor force participation compared to Illinois. As seen in Figure 4, in Maryland, a full half of the zip codes (185 of 370) have 65 percent or more females in the labor force with children under age six. In contrast, only 36 percent of Illinois zip codes (339 of 937) have female labor force participation rates in the same range.

Where children live. A higher proportion of Maryland children live in zip codes where there is higher female labor force participation. Figure 5 shows that in Maryland, 55 percent of children under age 13 (476,000 of 864,000) live in zip codes with 65 percent or higher females in the labor force with children under age six. In contrast, 24 percent of Illinois children (498,000 of 2.1 million) live in communities with female labor force participation within the same range. Similarly, there are higher proportions of children in those communities with very low female labor

force participation in Illinois compared to Maryland-30 percent (629,000 of 2.1 million) versus 10 percent (87,000 of 863,000). Sixteen percent of Illinois children under age 13 live in zip codes with high near poverty rates and low female labor force participation (332,000 of 2.1 million), versus 8 percent of Maryland children (65,800 of 864,000).





Percentage of Zip Codes by Percentage of Women in the Labor Force with Children **Under Age Six**

Figure 5:

Percentage of Children Under Age 13 Living in Zip Codes with Differing Percentages of Women in the Labor Force with **Children Under Age Six**

Size of Regulated Child Care Supply

Statewide

Overall, Maryland has more regulated child care than Illinois. There are 42 percent more regulated child care slots per child under age 13 in Maryland than in Illinois. Figure 6 shows that there are 211 regulated slots per 1,000 children under age 13 in Maryland, compared to 148 in Illinois. Most, but not all, of this difference can be attributed to state differences in family child care regulations that mean a significant number of legal family child care homes are not included in the Illinois CCR&R data and subsequently are not part of this analysis, while virtually all legal family child care homes are included in the Maryland data. Figure 7 shows the differences in size of regulated family child care supply and center-based supply, which are detailed in the sections that follow. Below, we also discuss the potential roles that Head Start and prekindergarten play in the two states.



Center Care

Including Head Start programs and state-sponsored prekindergarten programs, Maryland has approximately ten more slots per 1,000 children under age 13 than does Illinois. Maryland has 129 center-based slots per 1,000 children compared to 119 slots in Illinois. (See Figure 7.)

Regulated Family Child Care

Maryland's CCR&R data include nearly three times the regulated family child care slots than do the Illinois data, reflecting, in part, differences in



data included in the CCR&R data bases resulting from the differing definitions of license-exempt family child care, as described above. There are 82 slots per 1,000 children under age 13 in Maryland, compared to 29 slots per 1,000 children in Illinois. (See Figure 7.)

Head Start

Illinois has many more Head Start classrooms than does Maryland, and they account for a significant number of the center-based slots available in the state. However, limitations with the data make it impossible to calculate the exact proportion of center-based care that consists of partday Head Start programs. There are 438 such programs in Illinois. Approximately 255 of these provide Head Start exclusively for a total of 13,338 slots, which account for 6 percent of Illinois' center care. Another 183 programs have Head Start classrooms as well as other forms of centerbased care, but the number of Head Start slots is unclear. Since each program has at least one Head Start classroom with 20 slots, there are a minimum of 3,360 more Head Start slots. Combining the two sets of programs, the minimum estimate of Head Start slots is 16,338, or 7 percent of Illinois' overall center-based care supply.

In contrast, Maryland has 55 Head Start programs, all but six of which provide Head Start exclusively. All programs offering Head Start in Maryland account for 983 slots, or 1 percent of all center-based slots.



Notes: Center care refers to all licensed care in Maryland and all licensed and license-exempt care in Illinois, including Head Start and prekindergarten programs in both states. Regulated family child care in Illinois refers to all care for four or more children under age 12, including the caregiver's own children, that occurs in the home. Regulated family child care in Maryland refers to all care for unrelated children for a fee for more than 20 hours per month. See Table 2 for further information.

Figure 7: Regulated Child Care Slots per 1,000 Children Under Age 13: Center Care and Regulated Family Care

Prekindergarten

There are similar issues related to the prekindergarten programs in Illinois and Maryland. Illinois also has significantly more center-based programs offering prekindergarten, but the exact number of slots is unobtainable because of limitations with the data. There are a total of 602 programs that offer prekindergarten services—377 of which offer prekindergarten exclusively, and another 225 which offer prekindergarten in conjunction with other child care services. The prekindergarten programs have 14,439 slots, or 6 percent of Illinois' center-based supply. The remaining 225 programs each offer at least one prekindergarten classroom of 20 slots, accounting for an additional 4,500 slots, making prekindergarten slots a minimum total of 18,939, or 8 percent of overall center-based supply.

In Maryland, there are 194 programs offering prekindergarten services, with a total capacity of 6,787 slots, which account for 6 percent of Maryland's center-based supply.

When comparing the combination of the minimum number of Head Start and prekindergarten slots in Illinois with the total number of slots in Maryland, it becomes clear that there are significant differences in centerbased supply. In Illinois, Head Start and prekindergarten—which are primarily part-day, part-year programs—are at least 15 percent of Illinois' center-based supply. In Maryland, these programs are only 7 percent of the center-based supply.

Supply and Rates of Female Labor Force Participation

Overall supply. In Maryland, supply of regulated child care generally increases with increased female labor force participation. This is the case when considering the distribution of child care slots in general, or considering two components of regulated child care supply separately—center care and regulated family child care. The story is different in Illinois. There, the supply of regulated care generally increases as female labor force participation increases, but it peaks in those zip codes with participation rates of 64.9-75 percent (the second highest group). Regulated family child care slots increase steadily as female labor force participation increases; however there appears to be no relationship between female labor force participation and the distribution of center-based child care. Further analyses are needed to determine if other factors, such as low poverty rates in high female labor force participation zip codes, or the role of Head Start and prekindergarten in the supply of child care, account for this pattern. Figure 8 depicts the relationship between regulated child care slots in general and zip codes with different ranges of participation of females in the labor force with children under age six.

Regulated family child care. Figure 9 shows the relationship between regulated family child care slots and levels of female labor force

Distribution of Regulated Child Care

participation. Although regulated family child care is defined differently in the two states, the relationship between supply and female labor force participation is similar.



Sources: Maryland Committee for Children, LOCATE: Child Care³⁴⁴ Data, April 1996; Illinois Child Care Resource and Referral Agencies, CareFinder[®] Data, April 1996; 1990 U.S. Census.

Notes: Center care refers to all licensed care in Maryland and all licensed and license-exempt care in Illinois, including Head Start and prekindergarten programs in both states. Regulated family child care in Illinois refers to all care for four or more children under age 12, including the caregiver's own children, that occurs in the home. Regulated family child care in Maryland refers to all care for unrelated children for a fee for more than 20 hours per month. See Table 2 for further information.



Sources: Maryland Committee for Children, LOCATE: Child Care²²² Data, April 1996; Illinois Child Care Resource and Referral Agencies, CareFinder[®] Data, April 1996; 1990 U.S. Census.

Notes: Center care refers to all licensed care in Maryland and all licensed and license-exempt care in Illinois, including Head Start and prekindergarten programs in both states. Regulated family child care in Illinois refers to all care for four or more children under age 12, including the caregiver's own children, that occurs in the home. Regulated family child care in Maryland refers to all care for unrelated children for a fee for more than 20 hours per month. See Table 2 for further information.

Figure 8: Regulated Child Care Slots per 1,000 Population Under Age 13 by Percentage of Females in Labor Force with Children Under Six

Figure 9:

Regulated Family Child Care Slots per 1,000 Population Under Age 13 by Percentage of Females in Labor Force with Children Under Age Six *Center-based care.* Figure 10 depicts the variation in center-based care (including Head Start and state-sponsored prekindergarten) and shows the one exception to the general finding that regulated slots increase with female labor force participation. In Illinois, slots per 1,000 children peak in the second highest category of female labor force participation (65 to 74.9 percent) at 144 slots per 1,000, before dropping to 93 slots per 1,000 in those communities with the highest female labor force participation. In Maryland, slots per 1,000 start at 106 in the zip codes with the lowest female labor force participation and peak in those zip codes with the highest participation at 135 slots per 1,000.



Figure 10: Center-based Child Care Slots per 1,000 Population Under Age 13 by Percentage of Females in Labor Force with Children Under Age Six

Supply and Near Poverty Rates

further information

Overall regulated supply. The supply of regulated child care consistently decreases with increases in the near poverty rate in Maryland. This was not the case in Illinois. Figures 11, 12, and 13 lay out the differences between regulated supply and near poverty rates. The total slots of regulated supply in Maryland per 1,000 children (Figure 11), drops significantly (the range is 233 slots per 1,000 when the near poverty rate is lowest, compared to 168 slots per 1,000 when it is highest). There appears to be no relationship between the near poverty rate and the number of regulated slots per 1,000 children in Illinois. But even at its lowest proportion of slots, Maryland is still higher than Illinois.

care in Maryland refers to all care for unrelated children for a fee for more than 20 hours per month. See Table 2 for

Figure 11: Regulated Child Care Slots per 1,000 Population Under Age 13 by Percentage of Individuals in Near Poverty



Sources: Maryland Committee for Children, LOCATE: Child Care⁵⁶⁶ Data, April 1996; Illinois Child Care Resource and Referral Agencies, CareFinder[®] Data, April 1996; 1990 U.S. Census.

Notes: Center care refers to all licensed care in Maryland and all licensed and license-exempt care in Illinois, including Head Start and prekindergarten programs in both states. Regulated family child care in Illinois refers to all care for four or more children under age 12, including the caregiver's own children, that occurs in the home. Regulated family child care in Maryland refers to all care for unrelated children for a fee for more than 20 hours per month. See Table 2 for further information.

The official poverty line or threshold in 1994 was \$11,821 for a family of three and \$15,141 for a family of four. Those in the category "near poverty" live in families with incomes below 185% of the threshold.

Regulated family child care. Figure 12 shows the relationship between the near poverty rate by zip code and slots of regulated family child care per 1,000 children. In Maryland, the rate decreases only slightly for categories of zip codes with between zero and 30 percent near poverty rates before dropping significantly in those zip codes with the highest near poverty rates. In Illinois, slots per 1,000 of regulated child care increase with the near poverty rate for the same zip codes before dropping in the zip codes with the highest near poverty rates.

Center-based child care. In Figure 13, we depict the relationship between near poverty rate by zip code and slots of all center care. In Maryland, slots per 1,000 children decreases steadily as the near poverty rate increases. In Illinois, there is no apparent relationship between the near poverty rate and the supply of center care. Illinois has a significant number of centers that hold subsidy contracts with the state and are located in low-income areas. However, when doing cross-tabulations of the distribution of center-based care excluding the centers with contracts and the near poverty rate, the pattern remains the same.

Figure 12: Regulated Family Child Care Slots per 1,000 Population Under Age 13 by Percentage of Individuals in Near Poverty

Figure 13: Center-based Child Care Slots per 1,000 Population Under Age 13 by Percentage of Individuals

in Near Poverty



Sources: Maryland Committee for Children, LOCATE: Child Care³⁴⁴ Data, April 1996; Illinois Child Care Resource and Referral Agencies, CareFinder⁴⁵⁰ Data, April 1996; 1990 U.S. Census.

Notes: Center care refers to all licensed care in Maryland and all licensed and license-exempt care in Illinois, including Head Start and prekindergarten programs in both states. Regulated family child care in Illinois refers to all care for four or more children under age 12, including the caregiver's own children, that occurs in the home. Regulated family child care in Maryland refers to all care for unrelated children for a fee for more than 20 hours per month. See Table 2 for further information.

The official poverty line or threshold in 1994 was \$11,821 for a family of three and \$15,141 for a family of four. Those in the category "near poverty" live in families with incomes below 185% of the threshold.



Sources: Maryland Committee for Children, LOCATE: Child Care³⁴⁴ Data, April 1996; Illinois Child Care Resource and Referral Agencies, CareFinder[®] Data, April 1996; 1990 U.S. Census.

Notes: Center care refers to all licensed care in Maryland and all licensed and license-exempt care in Illinois, including Head Start and prekindergarten programs in both states. Regulated family child care in Illinois refers to all care for four or more children under age 12, including the caregiver's own children, that occurs in the home. Regulated family child care in Maryland refers to all care for unrelated children for a fee for more than 20 hours per month. See Table 2 for further information.

The official poverty line or threshold in 1994 was \$11,821 for a family of three and \$15,141 for a family of four. Those in the category "near poverty" live in families with incomes below 185% of the threshold.

Supply of Regulated Care for Extended Hours and Non-Traditional Hours

Extended Hours

A substantial portion of the care available in Maryland and Illinois is located in programs that indicate that they are open by 7:30 a.m. and close at 6 p.m. or later. Of the 211 slots per 1,000 children available in Maryland, 99 of them (47 percent) were located in programs who indicated such hours. Of the 148 slots per 1,000 children in Illinois, 61 of them (41 percent) came from programs that indicated such hours. In both states, the number of slots per 1,000 children available in programs that offered extended hours decreased substantially with the near poverty rate. In those zip codes with relatively low near poverty rates in Illinois, there were 99 slots per 1,000 children under age 13; in those zip codes with the highest near poverty rates, the slots per 1,000 children dropped to 41. Likewise, in Illinois, there were 130 extended-hour slots in the lowest poverty zip codes and 55 slots per 1,000 children in the highest poverty zip codes. In Maryland, the number of extended-hour slots increased significantly as female labor force participation increased; in Illinois there was no such relationship.

Non-Traditional Work Schedules

We found that there was a minimal amount of regulated child care available, in general, that met the needs of families who needed weekend and overnight care. Therefore, how such care varied by differences in female labor force participation or the near poverty rate was not meaningful. The low ratio of slots of regulated care per 1,000 children under age 13 during these hours is difficult to interpret. Although many reports have documented that a growing number of jobs, particularly those paying low wages, have non-traditional hours, it is unclear what the resulting demand for *regulated* child care may be in each state.

Overnight care. In Illinois, there were approximately 0.5 regulated programs per 1,000 children under age 13 that indicated to CCR&R agencies that at least some of their slots were available for overnight care. In Maryland, there were approximately 0.1 regulated programs who gave a similar response.

Weekend care. In Illinois, there were 0.3 regulated programs per 1,000 children that indicated to CCR&R agencies that at least some of their slots were available for weekend care. In Maryland, there were 1.2 programs per 1,000 children.

Relationship Between Price and Socioeconomic Characteristics

Figure 14:

Ratios of Median Weekly Fulltime Regulated Child Care Price for Children Ages Birth to Two for Different Levels of Female Labor Force Participation to the Price in Communities with Lowest Participation

Price and Female Labor Force Participation Rates

In Illinois, the full-time weekly median price of regulated care decreases with increasing rates of females in the labor force with children under age six, both for children ages birth to two and three to five. However, there does not appear to be a consistent relationship between median price and rate of female labor force participation in Maryland. Figure 14 depicts the relationship between relative price for children ages birth to two and the rate of female labor force participation. Figure 15 depicts the relationship between relative prices for children ages three to five and female labor force participation.



Sources: Maryland Committee for Children, LOCATE: Child Care⁵⁶ Data, April 1996; Illinois Child Care Resource and Referral Agencies, CareFinder[®] Data, April 1996; 1990 U.S. Census.

Note: Prices for Maryland and Illinois were calculated using programs as the unit of analysis.

Figure 15:

Ratios of Median Weekly Fulltime Regulated Child Care Price for Children Ages Three to Five for Different Levels of Female Labor Force Participation to the Price in Communities with Lowest Participation



Sources: Maryland Committee for Children, LOCATE: Child Care³⁴⁴ Data, April 1996; Illinois Child Care Resource and Referral Agencies, CareFinder⁵⁶ Data, April 1996; 1990 U.S. Census.

Note: Prices for Maryland and Illinois were calculated using programs as the unit of analysis.

Price and Near Poverty Rate

In both states, the full-time weekly median price of care decreases with increasing near poverty rates for children ages birth to two and three to five. Figure 16 depicts the relationship between the price for children ages birth to two and the near poverty rate. Figure 17 depicts the relationship between relative price for children ages three to five and the near poverty rate.



Sources: Maryland Committee for Children, LOCATE: Child Care⁵²⁰ Data, April 1996; Illinois Child Care Resource and Referral Agencies, CareFinder[®] Data, April 1996; 1990 U.S. Census.

Notes: Prices for Maryland and Illinois were calculated using programs as the unit of analysis. The official poverty line or threshold in 1994 was \$11,821 for a family of three and \$15,141 for a family of four. Those in the category "near poverty" live in families with incomes below 185% of the threshold.



Sources: Maryland Committee for Children, LOCATE: Child Care²⁶⁴ Data, April 1996; Illinois Child Care Resource and Referral Agencies, CareFinder[®] Data, April 1996; 1990 U.S. Census.

Notes: Prices for Maryland and Illinois were calculated using programs as the unit of analysis. The official poverty line or threshold in 1994 was \$11,821 for a family of three and \$15,141 for a family of four. Those in the category "near poverty" live in families with incomes below 185% of the threshold.

Figure 16: Ratios of Median Weekly Fulltime Regulated Child Care Price for Children Ages Birth to Two for Different Levels of Near Poverty to the Price in Least Poor Communities

Figure 17:

Ratios of Median Weekly Fulltime Regulated Child Care Price for Children Ages Three to Five for Different Levels of Near Poverty to the Price in Least Poor Communities

CONCLUSIONS

At this stage in the work of the Child Care Research Partnership, we are able to identify four preliminary findings concerning child care for low-income families.

First, it is clear that comparing differences in regulated child care supply and socioeconomic contexts between states is an important contextbuilding exercise and helps policymakers begin to develop hypotheses about differences and similarities within and between states. For instance, anecdotal accounts in Maryland about high child care vacancy rates make more sense when it is clear that Maryland has a relatively high regulated supply overall, including center-based supply, when compared with another state. Likewise, it is important to understand why support for child care infrastructure may need to be approached in a different manner in Illinois than in Maryland, given that 33 percent of Illinois' children live in areas with high near poverty rates, compared to 17 percent of Maryland's children.

Second, the general lack of supply of regulated care that meets the needs of families for extended work hours or non-traditional hours in both states is not a new or surprising finding. However, it serves to confirm the beliefs of the research partners in both states that unregulated child care is a very important source of care for parents who hold jobs with such hours. More research is needed to determine whether the limited availability of regulated child care for extended work hours and/or non-traditional hours reflects limited demand (parent preferences) or is an unmet consumer need. In addition, further research is needed to understand the interplay between the license-exempt and regulated child care markets.

Third, on face value, it appears that the rate of female labor force participation may be directly related to the size of the regulated child care supply and the median price of such care. Further analyses are needed to confirm whether it is actually female labor force participation, and/or some other socioeconomic characteristics associated with such participation rates that is related to the variation.

Finally, on face value, it appears that the near poverty rate may be directly related to the median price of regulated child care but not necessarily to the size of the regulated supply. Again, more analyses are needed to understand the exact relationship between the near poverty rate, the size of the supply, and price.

Endnotes

1. Phillips, D. A. (1995). *Child care for low-income families: Summary of two workshops.* Washington, DC: Board on Children and Families, National Research Council. Distributed by National Academy Press.

2. Long, S. K. & Clark, S. J. (1995). *Child care prices: A profile of six communities*. Washington, DC: The Urban Institute.

Kisker, E. E.; Hofferth, S. L.; Phillips, D. A.; & Farquhar, F. (1991). A profile of child care settings: Early education and care in 1990. Princeton, NJ: Mathematica Policy Research.

3. The other members of the partnership include the Illinois Department of Human Services, the Illinois Network of Child Care Resource and Referral Agencies, Maryland Committee for Children, Inc., Maryland Department of Human Resources' Child Care Administration, and the National Association of Child Care Resource and Referral Agencies.

4. Regulated child care supply is defined here as all family child care that falls within state regulatory guidelines and all center-based care, including part-day programs such as Head Start and prekindergarten.

5. Data on Maryland child care programs used in this paper are the property of Maryland Committee for Children, Inc. (MCC), and cannot be used in any way without the written permission of MCC. Similarly, data on Illinois child care programs used in this paper are the property of the Illinois Network of Child Care Resource and Referral Agencies (INCCRRA) and cannot be used without the written permission of INCCRRA.

6. "Underground care" is defined here as child care that is subject to state regulations but has not applied to be regulated. Since virtually all family child care is required to be regulated in Maryland, policymakers and practitioners in Maryland suspect that there may be a significant number of small family child care homes, legally required to be regulated, that are operating without being licensed.

7. Hofferth, S.; Brayfield, A.; Dietch, S.; & Holcomb, P. (1991). *The National Child Care Survey, 1990, a National Association for the Education of Young Children (NAEYC) Study* (Urban Institute Report No. 91-5). Washington, DC: Urban Institute Press.

8. Morgan, G. (1992). A hitchhiker's guide to the child care universe: A tour for new policy-makers. Washington, DC: National Association of Child Care Resource and Referral Agencies.

Blau, D. (Ed.). (1991). The economics of child care. New York, NY: Russell Sage Foundation.

Hayes, C. D.; Palmer, J. L.; & Zaslow, M. J., (Eds.). (1990). Who cares for America's children: Child care policy for the 1990s. Washington, DC: National Academy of Sciences.

9. The funding levels reported for each state are the highest amount spent in the years prior to 1997.

10. Illinois is currently undergoing restructuring, and oversight of all employment-related child care subsidies will be consolidated into a new Department of Human Services as of July 1997.

11. Specifically, the Illinois "license-exempt" programs included in our analyses are centers in the CareFinder[®] data base that serve children age three years or older and are operated by public or private schools, institutions of higher learning or other accredited institutions; that are located on federal government premises; that care for no individual child for no more than 10 hours per week and are operated by a church or social service agency; that offer short-term special activities and are operated by civic, charitable, and government organizations; and that offer temporary care while parents are on the premises. In Maryland, license-exempt programs are not included in *LOCATE: Child CareSM*. However, they are only programs that are located on federal government premises and programs that offer temporary care while parents must be an an programs that offer temporary care while parents are on the premises.

12. Because of missing values, 337 programs in Maryland and 93 programs in Illinois were eliminated from the final analysis. The conclusions are based on analyses of 15,420 programs in Maryland and 12,966 programs in Illinois.

13. U.S. Department of Labor, Women's Bureau. (1995). *Care around the clock: Developing child care resources before nine and after five.* Washington, DC: U.S. Department of Labor.

In addition, data from the National Child Care Survey of 1990 indicate that one-third of working mothers with incomes below the poverty line and one-fourth of working mothers with incomes between the poverty line and \$25,000 worked weekends. Almost half of poor working mothers reported working on a changing schedule. See endnote 7.

Bibliography

Blau, D. (Ed.). (1991). The economics of child care. New York, NY: Russell Sage Foundation.

Hayes, C. D.; Palmer, J. L.; & Zaslow, M. J., (Eds.). (1990). Who cares for America's children: Child care policy for the 1990s. Washington, DC: National Academy of Sciences.

Hofferth, S.; Brayfield, A.; Dietch, S.; & Holcomb, P. (1991). *The National Child Care Survey, 1990, a National Association for the Education of Young Children (NAEYC) Study* (Urban Institute Report No. 91-5). Washington, DC: Urban Institute Press.

Kisker, E. E.; Hofferth, S. L.; Phillips, D. A.; & Farquhar, F. (1991). A profile of child care settings: Early education and care in 1990. Princeton, NJ: Mathematica Policy Research.

Long, S. K. & Clark, S. J. (1995). Child care prices: A profile of six communities. Washington, DC: The Urban Institute.

Morgan, G. (1992). A hitchhiker's guide to the child care universe: A tour for new policymakers. Washington, DC: National Association of Child Care Resource and Referral Agencies.

Phillips, D. A. (1995). *Child care for low-income families: Summary of two workshops.* Washington, DC: Board on Children and Families, National Research Council. Distributed by National Academy Press.

U.S. Department of Labor, Women's Bureau. (1995). *Care around the clock: Developing child care resources before nine and after five.* Washington, DC: U.S. Department of Labor.