



Economic Impact *of the* Early Care and Education Industry *in Georgia*

REVISED **JUNE 2016**

An important part of Georgia's economy, the industry enables parents to engage in the workforce and contribute to the family's financial well-being. Georgia children benefit through additional cognitive, social, and educational opportunities. Those combined benefits help Georgia prosper.



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This study is a collaboration between Georgia State University's Andrew Young School of Policy Studies and the University of Georgia's Carl Vinson Institute of Government.

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EXECUTIVE SUMMARY | REVISED JUNE 2016

The early care and education industry is an important part of Georgia's economy.

Access to child care increases labor force participation, boosts local economies, and helps support a stable workforce. The industry enables parents to work, allowing them to care for their families financially while contributing federal, state, and local taxes to the economy. The industry employs teachers and family child care providers, administrators, and a variety of staff that support the operation of the state's early care and education system. Workers in these early care settings subsequently spend their earnings in Georgia, which in turn distributes additional employment and spending opportunities throughout Georgia's economy.

Quality child care also helps to build Georgia's workforce of the future. For decades, research has supported the economic importance of laying a strong foundation for learning in a child's earliest years. The evidence regarding the positive impact of early education on child development and educational attainment continues to grow (e.g., Arteaga et al. 2014; Deming 2009; Heckman et al. 2012). Early education enhances children's cognitive and social development, school readiness, health, and well-being, better equipping them for the workforce and thereby contributing to the long-term economic development of the state.

PURPOSE OF THE ECONOMIC ANALYSIS

This study, a collaborative effort between researchers at the University of Georgia's Carl Vinson Institute of Government and Georgia State University's Andrew Young School of Policy Studies, builds on a similar 2008 study by quantifying the daily economic activity, also called the short-term economic impact, of the early care and education industry in Georgia. The state has approximately 6,200 licensed or regulated for-profit and not-for-profit early care and education centers, family child care homes, group child care homes, prekindergarten programs, military family child care homes, Head Start sites, and military early care and education centers. Using data collected from a unique survey sent to all of these child care providers in the fall of 2014, this study focuses on the industry in the wake of the Great Recession (2007–2009). The estimates of economic impact are based on 2013–2014 financial data.

OVERVIEW OF RESULTS

- The total annual gross receipts of the industry for a 12-month period are estimated to be \$2.45 billion.
- The additional economic activity associated with the industry adds another \$2.24 billion to Georgia's economy annually. Thus, **the early care and education industry generated \$4.7 billion dollars of economic activity in the state** for 2013, putting it on par with industries such as pharmaceutical preparation manufacturing, printing, and health and personal care stores.
- A conservative estimate of the level of parents' annual earnings supported by the availability of child care in Georgia is \$24 billion.
- Through employment and other spending in the industry and by fueling expansions in other sectors of the economy, the industry annually generates \$374 million in federal tax revenue and \$161.7 million in state and local tax revenues.
- Early care and education provides 67,507 jobs in the industry itself and generates an additional 17,454 jobs in other market segments.

SNAPSHOT OF GEORGIA'S CHILD CARE INDUSTRY

The early care and education industry in Georgia cares for an estimated 337,024 children each year. The data acquired through the survey of child care providers present a profile of the industry in Georgia as well as the children served.

- Child care providers serve children of need: 36.6% of children in centers, 70.6% of children in family child care homes, and 68.9% of children in school-based programs receive meals subsidized through federal food assistance programs.
- More than 75% of centers and family child care homes operate 12 months per year; 10.9% of family child care homes and 2.8% of centers offer care on weekends (Saturday or Sunday), while larger percentages (20.6% and 7.7%, respectively) offer care in the evenings.
- The average weekly parent fee for infants ranges in family child care homes from \$91 for rural providers to \$127 for urban providers. Among centers, the average ranges from \$99 for rural providers to \$161 for urban providers.
- The average wage for administrators in centers is \$15.40 per hour. Lead teachers earn an average of \$12.30 per hour (\$16.45 for Georgia's Pre-K or Head Start lead teachers, and \$10.14 for all other lead teachers). Assistant teachers earn, on average, \$9.18 per hour (\$9.68 for Georgia's Pre-K or Head Start assistants, and \$8.85 for all other assistant teachers). In family child care homes, paid assistants or substitutes earn an average of \$8.25 per hour. In public schools offering Georgia's Pre-K, administrators or directors earn an average of \$58.57 per hour, lead teachers earn \$30.88, and assistant teachers \$12.23.
- Paid holidays, paid leave, and paid time for training and education are among the benefits most often offered by centers to their full-time employees, regardless of whether they house Georgia's Pre-K or Head Start programs. Nearly all public schools offering Georgia's Pre-K provide paid leave, health insurance, and retirement plans for their full-time employees.

EFFECTS OF THE GREAT RECESSION

The Great Recession (2007–2009) significantly affected Georgia's labor force, with the unemployment rate topping 10% in the state. The child care and early education industry continues to feel the impacts of the recession. According to both center and family child care home providers, decreased enrollment was where they most felt the recession. For a minority of centers and family child care homes, enrollment has returned to pre-recession levels, but for many more such providers, enrollment has only partially rebounded. During the downturn, providers postponed some business improvements, lowered fees, or extended services. Since then, sizable numbers of providers have made some postponed improvements or are now less likely to discount or waive fees. Approximately 40% of center-based and family child care home providers indicate that earning enough income is one of the greatest challenges to their business, underscoring the recession's lingering effects.

LONG-TERM BENEFITS AND QUALITY OF CARE

Beyond short-term economic impact, the early care and education industry provides long-term benefits to children, parents, and society. This study also summarizes current research in this area. Heckman, Grunewald, and Reynolds (2006), Temple and Reynolds (2007), Bartik, Gormley, and Adelstein (2012), Herbst and Tekin (2012), and the U.S. Executive Office of the President's Council of Economic Advisors (2015) are among those who provide or discuss detailed analyses and cost-benefit calculations of returns on early education. These include benefits to parents and children that accrue to society through increases in short-term and long-term worker productivity and reductions in spending on social services. They find that the long-term benefits of early care and education attest to the enormous impact of the industry.

Quality of care is another important factor that influences the industry's impact. This study explores the magnitude of and ways in which high-quality early care and education increases the economic impact of the industry. Quality boosts the industry's economic impact in the short run through providers, who must hire more workers and generally spend more money per child, and in the long run through children, who are better prepared for school and thus better prepared to eventually become contributing members of Georgia's workforce.

In January 2012, Georgia launched the voluntary Quality Rated program to assess, improve, and communicate the level of quality in early education and school-age care programs. Although the program was in its early stages during the survey period, more than half (54.3%) of the responding center- and home-based Quality Rated providers indicate that the program has improved or is expected to improve teaching practices.

CONCLUSIONS

As the findings of this study demonstrate, early care and education in Georgia is a multibillion dollar industry. Despite the lingering effects of the recent Great Recession, the industry continues to generate significant economic activity daily as providers buy goods and services to operate their businesses and employ teachers, administrators, and a variety of support staff. Additional monies are spent by the industry itself and industries directly related to early care and education, generating further economic activity. Finally, the industry allows parents and families to work in a myriad of industries and businesses because care for their children is available. In coming years, the industry can look forward to an even greater economic impact as the economy continues to improve.

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Chapter One Introduction

The early care and education industry is an important part of Georgia's economy, annually serving more than 337,000 children throughout the state. Access to early care and education increases labor force participation, boosts local economies, and helps support a stable workforce. The industry enables parents to enter the labor force, allowing them to care for their families financially while paying taxes, investing in housing, and engaging in other crucial economic activities. The industry employs teachers and family child care providers, administrators, and a variety of staff that support the operation of the state's early care and education system. Staff in these early care and education settings subsequently spend their earnings in Georgia, which in turn distributes additional employment and spending opportunities throughout Georgia's economy.

Early care and education also has long-term impacts in terms of child development that can improve school readiness, health status, and long-term prospects for labor market activities. Thus, quality early education helps to build Georgia's workforce of the future. For decades, research has supported the economic importance of laying a strong foundation for learning in a child's earliest years.

ESTIMATING SHORT-TERM ECONOMIC IMPACT

This study, commissioned by Bright from the Start: Georgia Department of Early Care and Learning (DECAL), quantifies the daily economic activity, also called the short-term economic impact, of the early care and education industry in Georgia over a 12-month period.¹ A collaborative effort between the University of Georgia (UGA) and Georgia State University (GSU), this analysis uses an economic model that estimates the dollar amount of economic activity generated by the early care and education industry for a 12-month period through the employment of teachers and support staff, purchase of special services, and the like. The economic impact of the industry is compared to other important and growing industries in Georgia to highlight its place in the economic activity of the state.

Data Sources

Many types of data are needed to conduct an analysis of this type. Furthermore, many of the data needed to estimate the industry's economic impact such as gross receipts, number and types of children served, and characteristics of the industry's workforce were not available from any existing source. Thus, researchers from GSU's Andrew Young School of Policy Studies and UGA's Carl Vinson Institute of Government, with the assistance of DECAL, developed a set of surveys, collectively called Georgia's Early Care and Education Economic Impact Survey, to gather this information. Due to differences in the various types of early care and education settings as well as distinct client bases, three similar but slightly different surveys were necessary: one for child care learning centers, one for family child care homes, and one for Georgia's Pre-K programs based in public schools. The Institute of Government distributed the surveys to all licensed and regulated early care and education programs in Georgia in the fall of 2014 and encouraged them to respond. These researchers gathered the data from the programs and combined them all into a collective data set, removing any information that could identify individual early education programs, staff members, teachers, or children. This collective data set was then given to GSU economists for analysis. Together, the two universities produced this report. The survey data provided critical information about the industry not available elsewhere.

¹ The study quantifies the short-term economic activity over a 12-month period that covers 2013 and 2014. This coverage of two years is due to differences in the timing of various data sources. In all cases, however, the data presented in this report cover a 12-month period.

Where possible, the economic impact analysis also uses data from the US Census and from the US Bureau of Labor Statistics as well as information provided directly by DECAL.

Overview of the Industry's Annual Economic Impact

Among the findings from this analysis, the following clearly demonstrate the reach and scope of the early care and education industry's economic impact in Georgia.

- The early care and education industry generated **\$4.7 billion dollars of economic activity** in the state during 2013, putting it on par with industries such as pharmaceutical preparation manufacturing, printing, and health and personal care stores.
- The total annual gross receipts of the industry for a 12-month period are an estimated \$2.45 billion. The additional economic activity associated with the industry adds another \$2.24 billion to Georgia's economy annually.
- A conservative estimate of the level of families' annual earnings supported by the availability of early care and education in Georgia is \$24 billion.
- Through employment and other spending in the industry and by fueling expansions in other sectors of the economy, the industry annually generates \$374 million in federal tax revenue and \$161.7 million in state and local tax revenues.
- Early care and education provides 67,507 jobs within the industry and generates an additional 17,454 jobs in other market segments.
- Under current conditions, for every dollar spent in the early care and education industry, the short-term impact is approximately one additional dollar generated in related economic activity.

A New Analysis for a Post-Recession Georgia

This study replicates a similar 2007 study also commissioned by DECAL. That study estimated that the industry contributed \$4.1 billion in economic activity in 2007 and provided direct and indirect employment for more than 74,000 individuals in Georgia. The economy has changed due to the Great Recession, which began in late 2007 and lasted through February 2010, generating high rates of unemployment. Georgia lost nearly 333,000 jobs, and the subsequent recovery has been slow.² Given these major changes in economic activity and the link that early education has in supporting the labor force, 2014 was an opportune time to update the analysis of the economic impact of the industry.

Several economic analyses of the early care and education industry in individual states have been developed since the early 2000s. Between 2009 and 2014, 33 separate economic impact studies were conducted for 22 different states.³ Some of these studies focused on a particular aspect of the economic impact of the early care and education industry such as that of an educated workforce.⁴ Other states updated previous studies of the overall economic im-

² Georgia Budget and Policy Institute reports a loss of 332,900 jobs between December 2007 and February 2010, <http://gbpi.org/wp-content/uploads/2014/05/SWGA-May-2014.pdf>.

³ The count was derived primarily from two online databases of economic impact studies: Cornell University professor Mildred Warner's Restructuring Local Government Website at http://cms.mildredwarner.org/economic_impact_studies, and The Early Learning Policy Group at <http://www.earlylearningpolicygroup.com/childcare-economic-impact.html>.

⁴ See California 2012 and New York, Long Island 2014 as examples.

part of the industry. Within the list of reviewed studies, six states—Alaska, California, Illinois, Montana, New York, and Washington—have updated a previous study.⁵

The findings in all states and studies demonstrate that the early care and education industry is a major economic force, impacting spending, employment, and tax revenue.

DEFINING THE EARLY CARE AND EDUCATION INDUSTRY IN GEORGIA

For the purposes of this study, the early care and education industry is defined as all early care and education programs licensed or regulated by DECAL, which includes programs serving children ages birth through five as well as school-age children up to age 13 who attend after-school, before-school, and summer programs. Nonlicensed, nonregulated care is not included in this analysis. Such nonparental care, provided by grandparents, other relatives, friends, or neighbors, may be free of charge or for pay.⁶ Consequently, this analysis understates the total economic impact of providing early care and education in Georgia.

The industry described in this study comprises five primary types of early care and education programs:

- **Child care learning centers** are programs operated by a person, society, agency, corporation, institution, or group that receives pay for group care. The child care learning center cares for 19 or more children under the age of 14 for less than 24 hours per day.
- **Family child care homes** are programs that operate in a private residential home less than 24 hours per day and provide care for three to six children under the age of 14 for pay.
- **Group child care homes** are programs operated by a person, society, agency, corporation, institution, or group that receives pay for group care. Such providers care for seven to 18 children under the age of 14 for less than 24 hours per day.
- **Georgia's Pre-K Program** is a voluntary, universal educational program for Georgia's four year olds to prepare children for kindergarten. The program is funded by the Georgia Lottery for Education. Georgia's Pre-K classrooms are housed in public schools and in private child care learning centers.
- **Early Head Start and Head Start** sites are federally funded programs that provide comprehensive early childhood and family development services to children from birth to five years old, pregnant women, and families.

In August 2014, DECAL prepared a list of all licensed and regulated early care and education programs in Georgia for use by this study's research team. At that time, there were approximately 6,300 programs in the state, including more than 5,500 for-profit and not-for-profit licensed child care learning centers and family child care homes (including Early Head Start and Head Start sites and more than 1,000 private centers offering Georgia's Pre-K) and 771 Georgia's Pre-K sites within local school systems. As of July 15, 2015, this number had decreased to just over 6,200 licensed or regulated early care and education programs operating in Georgia.

⁵ North Carolina also produced two studies conducted in 2011 and 2012 with similar focuses. Since these were over such similar time periods and conducted by two separate agencies, they are not counted as updates.

⁶ This economic analysis does include data provided by DECAL on the federal Child Care and Development Fund subsidies paid on behalf of low-income, working families. A very small percentage (<5%) of these subsidies in Georgia are reimbursed to family, friend, or neighbor providers who are nonlicensed but meet certain program requirements.

Snapshot of Georgia's Early Care and Education Industry

The data acquired through the survey of early care and education programs also reveal important details about the early care and education workforce, how the programs operate, and the parents and children they serve. Among the many findings about the industry presented throughout this report, a few may be of particular interest to local, state, and federal decision-makers.

- Centers, family child care homes, and schools serve children of need: 68.9% of children in school-based programs receive free or reduced-price lunch at school, while 36.6% of children in centers and 70.6% of children in family child care homes receive meals subsidized through the federal Child and Adult Care Food Program (CACFP).
- More than 80% of centers and 95% of family child care homes operate 12 months per year; 10.9% of family child care homes and 2.8% of centers offer care on weekends (Saturday or Sunday), while larger percentages (20.6% and 7.7%, respectively) offer care in the evenings.
- The average weekly parent fee for infants enrolled in family child care homes ranges from \$91 in rural areas to \$127 in urban areas. The average weekly parent fee for infants enrolled in child care learning centers ranges from \$99 in rural areas to \$161 in urban areas of the state.
- The average wage for administrators in centers is \$15.40 per hour. Lead teachers earn an average of \$12.30 per hour (\$16.45 for Georgia's Pre-K or Head Start lead teachers, and \$10.14 for all other lead teachers). Assistant teachers earn, on average, \$9.18 per hour (\$9.68 for Georgia's Pre-K or Head Start assistants, and \$8.85 for all other assistant teachers). In family child care homes, paid assistants or substitutes earn an average of \$8.25 per hour. In public schools offering Georgia's Pre-K, administrators or directors earn an average of \$58.57 per hour, lead teachers earn \$30.88, and assistant teachers \$12.23.
- Paid holidays, paid leave, and paid time for training and education are among the benefits most often offered by centers to their full-time employees; this includes centers that house Georgia's Pre-K or Head Start programs and centers that do not. Nearly all public schools offering Georgia's Pre-K provide paid leave, health insurance, and retirement plans for their full-time employees.

LONG-TERM INDUSTRY BENEFITS AND QUALITY OF CARE

Beyond the short-term economic impact, the early care and education industry provides long-term benefits to children and parents that accrue to society through increases in short-term and long-term worker productivity and reductions in spending on social services. The evidence regarding the positive impact of early education on child development and educational attainment continues to grow (e.g., Arteaga et al. 2014; Deming 2009; Heckman et al. 2012). Early education enhances children's cognitive and social development, school readiness, and health and well-being, better equipping them for the workforce and thereby contributing to the long-term economic development of the state.

This report provides an update on current research about the long-term contributions of the industry, including the benefits to parents, to children, and to society at large. The quality of the early care and education services is another important factor that influences the industry's impact. This report discusses the magnitude of and ways in which high quality early care and education increases the economic impact of the industry. Quality boosts the industry's economic impact in the short term, as programs hire more staff and generally spend more money per child, and in the long term, as children are better prepared for school and thus better prepared to become contributing members of Georgia's workforce.

In January 2012, Georgia launched the voluntary Quality Rated program to assess, improve, and communicate the level of quality in early education and school-age care programs. Although the program was in its early stages

during the survey period, more than half (54.3%) of the responding center- and home-based Quality Rated providers indicated that the program has improved or is expected to improve teaching practices.

REPORT ORGANIZATION

This report is divided into six chapters and three appendices that tell the story of Georgia's early care and education industry and its annual short-term impact.

Chapter 2 describes the economic model used to calculate the immediate impact of the early care and education industry on the state's economy and provides estimates of the short-term economic impact of the industry in Georgia.

Chapter 3 presents a profile of the early care and education industry in Georgia, including details about the children currently served, the programs providing the services, and the state's early care and education workforce.

Chapter 4 lends perspective to the previous chapters by presenting trends and changes in the state's population and economy that affect the need for and utilization of early care and education services. This chapter explores how the Great Recession affected Georgia's economy and looks specifically at how the state's current early care and education programs fared during and after the downturn.

Chapter 5 reviews prior research on the long-term economic impacts of the early care and education industry. The chapter also discusses the potential costs and benefits of quality early education as well as the short- and long-term economic impacts of such care. This chapter concludes by focusing on how surveyed early care and education programs perceive Quality Rated, Georgia's new quality rating and improvement system.

The final chapter summarizes the findings in this report and offers conclusions about the economic impacts that the early care and education industry has in Georgia.

Supplemental Appendix A offers further details about the Early Care and Education Economic Impact Survey developed for this study, including regional breakdowns of the results. Appendix B describes the survey research methods used.

Supplemental Appendix C provides copies of the three versions of Georgia's Early Care and Education Economic Impact Survey used in this study.

Together, these chapters describe a multibillion dollar industry vital to Georgia's economic future. The information offered in this report will provide administrators, policymakers, and citizens with a better understanding of the complex contributions of the early care and education industry to the state so that evidence-based decisions can be made for the benefit Georgia.



Chapter Two Short-Term Economic Impact of Georgia's Early Care and Education Industry

The early care and education industry in Georgia adds significantly to the economy of the state each year. This chapter presents the industry's short-term contributions to the state through the economic activity generated directly by the early care and education programs and the multiplier effects associated with the industry. The chapter analyzes data from the industry and discusses the following short-term impacts it had in Georgia during a 12-month period that covered parts of 2013 and 2014:

- In total, the industry generated \$4.7 billion of economic activity in Georgia in 2014.
- The total annual gross receipts of the industry for a 12-month period are an estimated \$2.45 billion.
- A conservative estimate of parents' annual earnings supported by the availability of early care and education in Georgia is \$24 billion.
- The output of the early care and education industry is similar to that of industries such as pharmaceutical preparation manufacturing, printing, and health and personal care stores.
- The early care and education industry in Georgia provides care for an estimated 337,024 children in the state each year.
- The industry employs 67,507 individuals and supports an additional 17,454 jobs in other industries.
- The industry annually generates \$374 million in federal tax revenue and \$161.7 million in state and local tax revenues.

In addition to short-term economic impact, the early care and education industry provides long-term benefits to children, families, and society through increases in short-term and long-term worker productivity and reductions in spending on social services. It is beyond the scope of this study to capture such effects, and the figures cited in this chapter do not include these additional benefits. Chapter 5 summarizes existing research examining some of the long-term implications of this industry and the provision of quality child care.

ESTIMATING ECONOMIC IMPACT

This chapter uses a standard, well-respected method for determining the short-term economic impact of the early care and education industry in Georgia. IMPLAN, a widely used and accepted input-output economic model, allows researchers to go beyond measuring economic impact simply by gross receipts. It allows researchers to estimate the *indirect effects* and *induced effects* of an industry. In this analysis, indirect effects refer to the increased demand for goods and services by firms that are suppliers to the early care and education industry. Induced effects refer to changes in the broader economy due to the spending of employees in both the early care and education industry and those industries that do business with the early care and education industry.

Before estimating gross receipts and then applying the IMPLAN model to calculate an industry's short-term economic impact, it is important to understand the size and scope of that industry. The number of early care and education programs, number of employees and their wages, and number of children and families served are all important factors in calculating and understanding the early care and education industry's impact. Thus, this chapter begins by estimating the size and scope of the industry based on these four metrics to provide context for the economic analysis that follows.

Unlicensed and informal, nonparental care provided by grandparents, other relatives, friends, or neighbors, whether paid or not, is not represented in these analyses.⁷ Consequently, the economic impact of the industry calculated in this chapter and cited throughout this report likely underestimates the industry's reach.

Many of the data cited in this chapter come from the 2014 Georgia's Early Care and Education Economic Impact Survey, a set of three similar surveys developed for child care learning centers, family child care homes, and public schools offering Georgia's Pre-K. Supplemental Appendix B gives further details about the survey methodology, and Supplemental Appendix C provides copies of each of the survey instruments. Other data used to calculate the economic impact of Georgia's child care industry come from the US Census Bureau, from the US Bureau of Labor Statistics, and directly from Bright from the Start: Georgia Department of Early Care and Learning (DECAL).⁸

SIZE OF GEORGIA'S EARLY CARE AND EDUCATION INDUSTRY

This section estimates the size and scope of the early care and education industry in Georgia using four metrics: the number of DECAL licensed or regulated providers, the number of educators and others employed in the industry and their estimated annual wages, the number of children served compared to the overall child population in the state, and the number of families served by the industry.

Number of Early Care and Education Programs

The early care and education industry is defined in this study as all early care and education programs licensed or regulated by DECAL. This includes programs serving children ages birth to five years and programs serving school-age children up to age 13 in after-school, before-school, and summer programs. Chapter 1 provides more details about the various types of child care providers included in the industry.

At the time of the survey in 2014, more than 6,300 for-profit and not-for-profit child care learning centers, family child care homes, and public Georgia's Pre-K programs were operating in the state. More than 3,200 centers received the center-based survey, including 3,012 child care learning centers (including Head Start and Early Head Start Providers), 226 group child care homes, 11 Department of Defense child care learning centers, and five "university, technical college, and other" centers. Over 2,300 family child care homes were in operation at the time of the survey, and 771 Georgia's Pre-K sites were housed within local school systems.

Figure 2.1 summarizes the types of early care and education establishments in Georgia at the time of the survey. Child care learning centers are the largest subgroup of establishments, including 3,012 individual programs representing 48% of the licensed early care and education population; centers in total represent 51% of the licensed early care and education population and approximately 85% of the children served.⁹ Family child care homes account for another 36% of all establishments. Child Care Aware, a national agency that counts the number of center-based and home-based programs, indicates that Georgia differs from the nation in its percentage of children served in a center-based setting compared to a home-based setting. According to the DECAL licensing database, 64% of Georgia's programs were based in a center or a local school system at the time of the survey.

⁷ Part of the economic analysis in this chapter includes data provided by DECAL about the federally funded Childcare and Parent Services (CAPS) program, which subsidizes early care and education for low-income, working families. A very small percentage (<5%) of the CAPS subsidies in Georgia are reimbursed to family, friend, or neighbor providers.

⁸ DECAL is Georgia's early education department charged with overseeing various components of the state's early education industry. Additional information about DECAL can be found at www.decals.ga.gov. DECAL commissioned and funded this research.

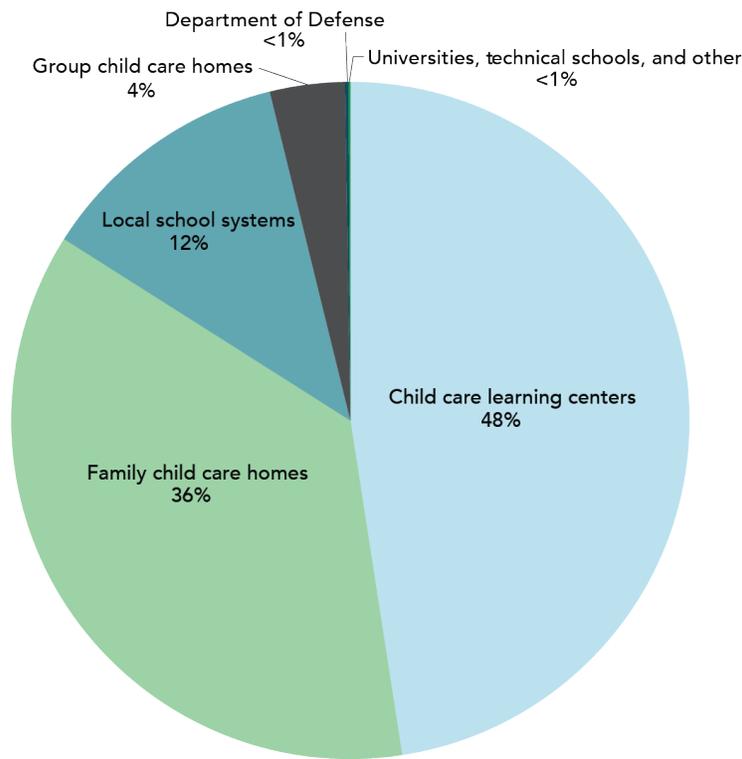
⁹ The counts of programs are based on licensed program data supplied by DECAL. The percentages of students served are based on the Early Care and Education Economic Impact Survey data.

Child Care Aware calculated that number to be 63% in 2015 in Georgia compared to only 40% in the remainder of the United States. Compared to other states, Georgia provided more licensed slots per child under the age of four, 0.51 compared to 0.42 nationally (Child Care Aware 2015).

Early Head Start and Head Start are federally funded programs regulated by the federal government. There are approximately 340 Head Start and Early Head Start sites currently operating in Georgia (Office of Head Start 2015) serving more than 27,000 children (Georgia Head Start Association 2014). The federal government expenditures on these programs in Georgia in fiscal year 2014 were \$203 million (US Department of Health and Human Services 2014).

Georgia’s Pre-K Program is administered by DECAL and served more than 81,000 four year olds in 2014.¹⁰ Georgia’s Pre-K classrooms are located in public schools and private child care learning centers, and many offer care before and after a typical school day. It is important to note that many of the private child care learning centers offering Georgia’s Pre-K serve other age groups as well. For example, these centers often have infant, two-year-old, and three-year-old classrooms as well as four-year-old classrooms that are not funded by Georgia’s Pre-K Program.

Figure 2.1. Child Care Programs in Georgia by Type



Source: DECAL licensing data corresponding to the list of surveyed providers

¹⁰ Based on Georgia’s Pre-K final roster count data 2014.

Level of Employment

Another important factor in measuring the size and scope of the early care and education industry in Georgia is the number of industry employees and the wages they earn. Many economic impact studies of other industries use national data sources such as the US Census Bureau and the Bureau of Labor Statistics (BLS) to make such estimates. However, due to the early care and education industry's complex composition and differing definitions of the workers included in the industry, accurately estimating the number of employees in the state and their wages requires specific information not available from existing data sources. Thus, most early care and education economic impact studies collect specific data to determine the full size of the industry and use national data sources to make industry comparisons. Following the methodology used by other states, researchers developed Georgia's Early Care and Learning Economic Impact Survey to gather more accurate data from the state's early education programs that were then used to measure the number of industry employees and their wages.

Based on the survey data, the early care and education industry in Georgia employs an estimated 67,507 individuals. These workers include family child care home operators, center owners and directors, teachers of children of various ages from newborns through age 13 (i.e., before-school, after-school, and summer care for school-age children), Georgia's Pre-K teachers working in private child care learning centers and public schools, and the assistant teachers, specialists, cooks, drivers, and others employed by the early education programs. Chapter 3 provides detailed information about these workers, their jobs, their wages, and the children they serve based on survey response data.

The remainder of this section follows most early care economic impact studies by using federal data sources to make broad comparisons between the early care and education industry and other industries in Georgia and between Georgia and other states. Note that federal data sources may not capture employees of many of the industry's small establishments (primarily family child care home operators) or support staff or ancillary employees such as janitors and drivers, and they are not able to distinguish Georgia's Pre-K employees from other workers at public schools. Consequently, both the US Census Bureau and the BLS vastly underestimate the size of the industry in Georgia. For example, the US Census Bureau's County Business Patterns report, which publishes employment by sectors of the economy for states and other geographic areas, estimates that only 33,286 individuals were employed in the early care and education industry in Georgia in 2013, less than half the number estimated using survey data. Other research has similarly found that the number of paid employees in the child care industry was twice that estimated by either the Census Bureau or the BLS (Burton et al. 2002).

Despite these discrepancies in numbers, the County Business Patterns provides a useful comparison for viewing the relative economic importance of the early care and education industry. Table 2.1 reports the estimated number of employees for 11 industries close in size to the most recent County Business Patterns' (2013) estimate of the size of the early care and education industry in Georgia. Total employment in Georgia was an estimated 3.46 million that year. County Business Patterns reports that employment in "Child Day Care Services" is on par with other large industries including legal services, building material and supplies dealers, general freight trucking, and automobile dealers. If the more accurate survey data estimate of 67,507 early education workers is used for comparison, then early care and education industry is more comparable in number of employees to real estate and leasing, all grocery stores, food manufacturing, and accounting and legal services.

Table 2.1. Employment in Georgia by Industry as Reported by Census County Business Patterns

Industry	Employment
Construction of Buildings	30,876
Legal Services	32,011
Amusement, Gambling, and Recreation Industries	32,033
Management Consulting Services	32,372
Building Material and Supplies Dealers	33,169
Child Day Care Services	33,286
Wired Telecommunications Carriers	33,336
General Freight Trucking, Long Distance	33,356
Animal Slaughtering and Processing	34,314
Automobile Dealers	34,803
Architectural, Engineering, and Related Services	35,766

Source: County Business Patterns 2013

Employee wages are another important factor in estimating economic impact. Again, as with the number of employees, federal sources on industry wages are likely skewed because of the types of industry employees left out of their calculations. Chapter 3 provides a detailed analysis of the wages received by workers in Georgia’s early care and education industry based on survey data. This section, instead, uses BLS data to compare employee wages in the Georgia early care and education industry to other industries in Georgia.

According to the BLS (2014), wages paid to those in child care occupations are relatively low.¹¹ The BLS reports that even for the higher level administrative staff in child care, there are large wage disparities compared to “elementary and secondary” administrative occupations. In 2014, the BLS reports that the average annual wage of educational administrators in “preschool and child care” was \$51,120 compared to \$86,940 for educational administrators in “elementary and secondary education.” For nonmanagement occupations, the estimated average annual income for those in child care occupations (“child care workers”) was \$20,330. A similar annual wage was paid to hotel desk clerks and restaurant cooks.

¹¹ Note that the BLS distinguishes among child care workers, preschool teachers, and teacher assistants, but these categories are not so clear-cut in Georgia. The official BLS definitions are listed below:

Preschool Teachers, Except Special Education

Instruct preschool-aged children in activities designed to promote social, physical, and intellectual growth needed for primary school in preschools, day care centers, or other child development facilities. May be required to hold state certification.

Childcare Workers

Attend to children at schools, businesses, private households, and childcare institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.

Teacher Assistants

Perform duties that are instructional in nature or deliver direct services to students or parents. Serve in a position for which a teacher has ultimate responsibility for the design and implementation of educational programs and services.

Preschool teachers' average wages were \$31,350, considerably lower than elementary and kindergarten teachers, whose average annualized wages were \$53,840.

According to the BLS, child care workers—which excludes preschool teachers, teacher's assistants, and administrators—received about 17% less than manicurists and pedicurists, 35% less than preschool teachers, and 40% less than health care support workers. They received about half the earnings of tractor trailer drivers, 60% less than the wages earned by kindergarten and elementary school teachers, and one-third of those earned by registered nurses.

Table 2.2. Average Annual Wages in Georgia by Occupation

Occupation	Average Annual Wage
Hotel, Motel, and Resort Desk Clerks	\$19,250
Teacher Assistants	\$20,320
Child Care Workers	\$20,330
Cooks, Restaurant	\$22,510
Manicurists and Pedicurists	\$24,370
Preschool Teachers, Except Special Education	\$31,350
Healthcare Support Workers, All Other	\$33,950
Heavy and Tractor Trailer Truck Drivers	\$40,560
Vocational Education Teachers, Postsecondary	\$46,370
Education Administrators, Preschool and Child Care Center	\$51,120
Kindergarten Teachers, Except Special Education	\$53,840
Architectural and Civil Drafters	\$54,000
Elementary School Teachers, Except Special Education	\$54,030
Paralegals and Legal Assistants	\$55,210
Registered Nurses	\$62,350
Information Security Analysts	\$85,670
Education Administrators, Elementary and Secondary School	\$86,900
Electrical Engineers	\$87,080

Source: US Bureau of Labor Statistics Occupation and Wage Data 2014

Note: "Child care workers" excludes preschool teachers, assistant teachers, and administrative staff.

Table 2.3 shows that Georgia ranked 31st in the country in average wages paid to child care workers but was higher than neighboring states Alabama, South Carolina, and Tennessee. Preschool teacher and administrator wages in Georgia compared favorably to other states in the country. Preschool teacher wages ranked 19th in the country and were higher than Georgia's neighboring states. Preschool and child care center administrator wages ranked 15th in the country and were higher than Georgia's neighboring states with the exception of Florida.

Table 2.3. Average Annual Wages, State Comparisons

	Child Care Workers	Preschool Teachers, Except Special Education	Education Administrators, Preschool and Child Care Center
Georgia	\$20,330	\$31,350	\$51,120
Georgia's National Rank	31	19	15
Alabama	\$18,330	\$27,710	\$49,030
Florida	\$20,790	\$26,180	\$65,400
North Carolina	\$20,520	\$26,100	\$48,090
South Carolina	\$18,470	\$28,390	\$48,500
Tennessee	\$19,920	\$29,830	\$40,090

Source: US Bureau of Labor Statistics Occupation and Wage Data 2014

Note: "Child care workers" excludes preschool teachers, assistant teachers, and administrative staff.

As discussed previously, data from the Early Care and Education Economic Impact Survey are more likely to provide accurate estimates of the number of workers in the industry and their wages than the data from the US Census and BLS reported above. Even given their undercounting of employees in the early care and education industry, these federal data sources demonstrate that the industry has employment on par with several important industries in Georgia.

Number of Children Served

The number of children served is another important factor in measuring the size of Georgia's early care and education industry. Data from the Early Care and Education Economic Impact Survey, Georgia's Pre-K enrollment data provided by DECAL, and Head Start and Early Head Start enrollment-by-age data from the Georgia Head Start Association indicate that the industry provided care for an estimated 337,024 children in 2014.

Table 2.4 shows that enrollment in early care and education varies dramatically across age groups, with 15.7% of Georgia infants, children between birth and 12 months old, being served. At the toddler stage, children one and two years old, 24.9% of the potential demand was served in 2014, and 43.6% of the three-year-old population attended a formal program. The percentage of four year olds was the highest at 86.6% served, which included children attending Head Start and Georgia's Pre-K programs. For children of school age, ages five through 13, the percentage served by the industry was only 5.9%.

Table 2.4. Georgia Population Served by Age Group

	Population	Enrollment	Percent Served
Birth through 12 months (age zero)	129,104	20,218	15.7%
12 – 24 months (age one)	129,915	32,168	24.8%
24 – 36 months (age two)	132,990	33,166	24.9%
36 – 48 months (age three)	133,811	58,367	43.6%
48 – 60 months (age four)	136,855	118,497	86.6%
60 months – 13 years (school age)	1,269,071	74,608	5.9%

Source: US Census annual estimates of population by single years of age as of July 1, 2014. Enrollments estimated using three sources: 1) administrative data from the Georgia Head Start Association, 2) Georgia's Pre-K administrative data from DECAL, and 3) data from the Early Care and Education Economic Impact Survey.

It is important to note that the number of children served does not represent demand for early education and care. The number of children enrolled potentially underestimates the demand for child care because some families may have preferred to enroll their children but did not for various reasons. The presence of waiting lists for quality care points to a potential undersupply of care in the state. Comparing enrollments to the number of young children in homes with two working parents (or a single-parent household with one working parent) provides a potentially better estimate of the demand for child care. Data from the US Census show that the number of children under age six in working households in Georgia is 511,694 (American Community Survey 2013). Comparing this number to the estimated enrollment of children birth through age five indicates that approximately 53% of children under age six in working families (two-parent and single-parent households) are served by the early care and education industry. Again, because the estimated enrollment excludes informal and other unreported care and only includes licensed and regulated programs, this underestimates the number of Georgia's young children receiving early care and education.

Number of Parents Served

The number of parents served by the early care and education industry in Georgia is difficult to determine. Below, two different methods are used to estimate the total number of parents served and the total amount of parents' wages supported by the early care and education industry in Georgia.

The first method uses data from the US Census Bureau, which indicates that in 2013 there were 192,651 households in Georgia with two parents in the labor force and 166,639 single-parent households with that parent engaged in the labor force (see Table 2.5). Thus, approximately 551,941 individual parents in Georgia in the labor force had children under six years old. The total wage and salary income of all of those households was an estimated \$24.1 billion in 2013. This estimate using US Census data is likely a conservative one because some nonworking families utilize child care services and because many working parents rely on after-school, before-school, and summer care for their school-age children.

Table 2.5. Number of Georgia Households with Children Under Six Years Old with Parent(s) in the Labor Force

	Number of Households	Average Household Wages	Estimate of Total Parents' Wages Supported
In two-parent families, both parents in labor force	192,651	\$92,222	\$17,766,660,522
In single-parent families, parent in the labor force	166,639	\$38,244	\$6,372,941,916
Total			\$24,137,820,780

Source: Calculations based on data from the American Community Survey 2013

A second way to estimate the number of working parents served and their earnings is to look at tax filers who receive the federal child care credit. For tax year 2013, the Internal Revenue Service reports that 217,060 tax returns received this credit in Georgia. An estimated 55% of these returns represent two parents; therefore, the total number of parents benefiting from this credit is 336,443. The total amount of adjusted gross income associated with the returns that included the child care tax credit was approximately \$20.45 billion.

While it is difficult to estimate with specificity, the early care and education industry clearly supports the incomes of hundreds of thousands of working parents in Georgia who earn tens of billions of dollars in wages.

GROSS RECEIPTS OF GEORGIA'S EARLY CARE AND EDUCATION INDUSTRY

The short-term economic impact of Georgia's early care and education industry is estimated using annual gross receipts. In this study, gross receipts measure the amount of resources that go through the early care and education industry. This metric is a common one used in many economic impact studies done by other states to measure the size of the early care and education industry and to estimate its total economic impact.¹² The information in the previous section about the size and scope of the industry give context to the estimate of gross receipts as well as some background for understanding where these numbers come from.

Early care and education programs collect monies from various sources and, in turn, spend those dollars on their employees' wages, transportation for their students, supplies, and other goods and services. Gross receipts represent all of the revenues received by programs across the state and are nearly equivalent to the aggregate expenditures. It is difficult to measure programs' expenditures even with the survey designed for this study, so gross receipts are used as the basis for calculating the economic impact of the industry in Georgia.

Gross receipts can be calculated in numerous ways depending on the data available, but in general they are the sum of parents' fees; federal, state, and local payments to programs; and other contributions from companies, philanthropists, or other entities.

¹² For example, Nevada 2011, New Mexico 2010, Oregon 2010, Montana 2008, North Carolina 2011, and southeastern Wisconsin 2009 among others.

Parent Fees

Parent fees are the largest portion of gross receipts in Georgia, totaling more than \$1.5 billion per year. The Early Care and Education Economic Impact Survey response data were used to estimate the total statewide amount of parent fees collected for one year. To arrive at this total, researchers first determined average enrollment and average weekly tuition rates for particular age groups and then multiplied those figures by the number of programs for a typical number of weeks of service per year. Table 2.6 details the calculation used to estimate the amount of parent fees collected by child care learning centers and family child care homes located in urban (Panel A) and rural counties (Panel B).¹³

Many economic impact studies use average price data from market rate surveys. Across all parent fee categories, average weekly tuition rates calculated using data garnered from this study's Early Care and Education Economic Impact Survey are consistent with those found in the most recent Georgia Child Care Market Rate Survey (2013). The Early Care and Education Economic Impact Survey responses also provide data that were used to calculate average provider enrollment for particular age group classifications. Administrative data from DECAL were used for the number of programs that were licensed to provide early care and education for each age group.

The number of child care learning centers serving each age group is based on administrative data provided by DECAL and includes licensed programs at the time of the survey. Infants, toddlers, and preschoolers are assumed to be in care for 48 weeks per year, on average. School-age and Georgia's Pre-K children are assumed to be in before/after-school care for 36 weeks per year and in full-time holiday/summer care for 14 weeks, based on a typical Georgia school year calendar. Georgia's Pre-K programs housed in public schools are not included in the parent fee calculation because they do not appear to collect any parent fees associated with their Pre-K students.¹⁴ To summarize, the total parent fees are calculated using the following formula:

$$\text{Number of programs by age group} \times \text{Average enrollment by age group} \times \text{Average weekly tuition rate} \times \text{Weeks in care}$$

Based on this calculation, the total amounts of parent fees collected by programs located in urban and rural counties were approximately \$1.45 billion and \$130 million, respectively. Thus, across the state of Georgia over one 12-month period, parent fees totaled \$1.58 billion.

¹³ The survey asked separate questions pertaining to average weekly base tuition rates, federal and state subsidies, and revenues from other sources. The parent fee calculation assumes that subsidies were not included in the base tuition rates specified by the survey respondents.

¹⁴ Based on survey responses as well as a search of Georgia School District Expenditure and Revenue reporting regarding Georgia's Pre-K programs.

Table 2.6. Parent Fee Calculation

Panel A. Urban Counties

Child Care Learning Centers					
	Number of Centers	Average Enrollment	Average Tuition	Weeks	Total Parent Fees
Infants (0m–12m)	1,962	8	\$160.50	48	\$121,674,082
Toddlers (13m–35m)	2,117	25	\$151.93	48	\$383,345,240
Preschool (36m–47m) & 4y (not GA Pre-K)	2,383	30	\$137.49	48	\$475,259,967
GA Pre-K (4y)	941	33	\$135.84	36	\$151,628,538
School-age (5y+)	2,390	27	\$85.71	36	\$197,269,760
Summer	1,864	27	\$105.87	14	\$73,892,168
Total for Urban Centers					\$1,403,069,756

Family Child Care Homes					
	Number of FCCH	Average Enrollment	Average Tuition	Weeks	Total Parent Fees
Infants (0m–12m)	1,377	1	\$126.55	48	\$7,277,358
Toddlers (13m–35m)	1,543	3	\$120.23	48	\$23,507,989
Preschool (36m–47m) & 4y (not GA Pre-K)	1,469	1	\$111.81	48	\$10,485,735
School-age (5y+)	1,091	1	\$82.19	36	\$4,034,902
Summer	1,597	1	\$92.95	14	\$2,598,241
Total for Urban FCCH					\$47,904,225
Urban Total					\$1,450,973,980

Source: Calculations based on the Early Care and Education Economic Impact Survey. The 2013 Georgia Market Rate Survey was used to estimate the number of urban programs that offer summer care and the average weekly tuition rate for summer care. Average enrollment in summer care is assumed to be equal to the average enrollment for school-age children.

Notes: Urban counties are those with populations greater than 35,000. GA Pre-K represents four year olds attending private Georgia’s Pre-K programs that were charging parents fees and tuition for four year olds. These fees are assumed to be for before- and after-school care or for summer care. Summer care is fees for the schoolage population. Public school–based Georgia’s Pre-K is not included in these tuition and fee amounts. Average enrollment represents average enrollment per center and not per classroom. Totals may not sum exactly due to rounding.

Table 2.6. Parent Fee Calculation, continued

Panel B. Parent Fee Calculation, Rural Counties

Child Care Learning Centers					
	Number of Centers	Average Enrollment	Average Tuition	Weeks	Total Parent Fees
Infants (0m–12m)	367	6	\$99.24	48	\$9,929,806
Toddlers (13m–35m)	398	17	\$96.16	48	\$31,524,554
Preschool (36m– 47m) & 4y (not GA Pre-K)	499	17	\$89.16	48	\$35,855,460
GA Pre-K (4y)	89	38	\$97.86	36	\$11,967,604
School-Age (5y+)	426	21	\$63.06	36	\$20,482,229
Summer	368	21	\$118.47	14	\$10,155,323
Total for Rural Centers					\$119,914,976
Family Child Care Homes					
	Number of FCCH	Average Enrollment	Average Tuition	Weeks	Total Parent Fees
Infants (0m–12m)	338	1	\$90.76	48	\$1,133,817
Toddlers (13m–35m)	397	3	\$88.10	48	\$4,214,084
Preschool (36m–47m) & 4y (not GA Pre-K)	374	2	\$82.68	48	\$2,345,061
School-Age (5y+)	305	2	\$65.80	36	\$1,091,013
Summer	397	2	\$98.32	14	\$824,593
Total for Rural FCCH					\$9,608,569
Rural Total					\$129,523,546
Total Parents Fees (Urban + Rural)					\$1,580,497,526

Source: Calculations based on the Early Care and Education Economic Impact Survey. The 2013 Georgia Market Rate Survey was used to estimate the number of rural programs that offer summer care and the average weekly tuition rate for that care. Average enrollment in summer care is assumed to be equal to the average enrollment for school-age children.

Note: Rural counties are those with populations under 35,000. GA Pre-K represents four year olds attending private Georgia’s Pre-K programs that were charging parents fees and tuition for four year olds. These fees are assumed to be for before- and after-school care or for summer care. Summer care is fees for the school-age population. Public school–based Georgia’s Pre-K is not included in these tuition and fee amounts. Average enrollment represents average enrollment per center and not per classroom. Totals may not sum exactly due to rounding.

Federal and State Funds Received by Early Care and Education Programs

A variety of federal and state programs provide funds to early care and education establishments in Georgia. Because these funds become part of the monies that the programs use to pay wages, purchase supplies, and operate their businesses, they are included in gross receipts and add to the industry’s total direct economic impact. A total of \$856 million in federal and state funding in Georgia is included in the early care and education industry’s gross receipts for FY 2014. Table 2.7 presents a breakdown of all state and federal funds received by early care and education programs that year.

Table 2.7. Federal and State Funding Received by Child Care Programs in Georgia, FY 2014

Federal Child Care and Development Fund - Child Care Subsidies	\$218,147,717
Federal Child Care and Development Fund - Quality Initiatives (Summer Transition Program, Georgia Program for Infant Toddler Care, Child Care Resource and Referral Agencies, scholarships, and incentives)	\$12,834,757
Head Start and Early Head Start	\$191,175,066
Georgia's Pre-K Program	\$293,768,173
Child and Adult Care Food Program	\$111,305,757
Summer Food Service Program	\$13,023,741
TANF funds for DFCS After-school Care Program	\$15,415,603
Total Federal and State Funding	\$855,670,814

Source: Based on data provided by DECAL

Georgia’s Pre-K Program, administered by DECAL, represents the largest state or federal funding source for early care and education programs in Georgia at \$294 million in FY 2014.

The federal Child Care and Development Fund (CCDF) provides \$231 million in child care subsidies and quality initiative revenues. The child care subsidy program, called Childcare and Parent Services (CAPS), is administered by DECAL.

Head Start and Early Head Start are federal programs administered by the US Department of Health and Human Services Administration for Children and Families. These programs contributed \$191 million to the support of early care and education and comprehensive services for low-income families in Georgia in 2014.

DECAL also administers two federal nutrition subsidy programs, the Child and Adult Care Food Program and the Summer Food Service Program. Together, these represent \$124 million in food reimbursements to early care and education programs in Georgia.

The Georgia Department of Human Services’ Division of Family and Children Services administers federal Temporary Assistance for Needy Families (TANF) funds allocated to a variety of early care and education programs, including after-school care. DECAL estimates that \$15.4 million in TANF funds were allocated to various programs related to child care in 2014.

Other Contributions

The final component of the gross receipts calculation is donations. These funds could come from the private sector in the form of cash or other contributions and from the nonprofit sector. It has proven very difficult to estimate the value of these contributions and, as a result, this study relies upon contributions reported on IRS 990 tax returns. Every nonprofit entity (generally organized under IRS section 501(c)(3) must file a detailed tax return. Researchers downloaded the returns for all nonprofits with the key word “child care.” Based on the applicable contributions reported on these returns, an estimated \$16.9 million in donations supported Georgia’s early care and education industry in 2014.

Total Gross Receipts

Annual total gross receipts for the early care and education industry in Georgia are estimated at \$2.45 billion. Parent fees represent more than 60% of gross receipts and are estimated to be \$1.58 billion annually. Table 2.8 shows that most of the remaining gross receipts, about 35% of the total, were from federal and state funding, and charitable contributions accounted for the rest.

Table 2.8. Total Annual Gross Receipts of Georgia’s Early Care and Education Industry

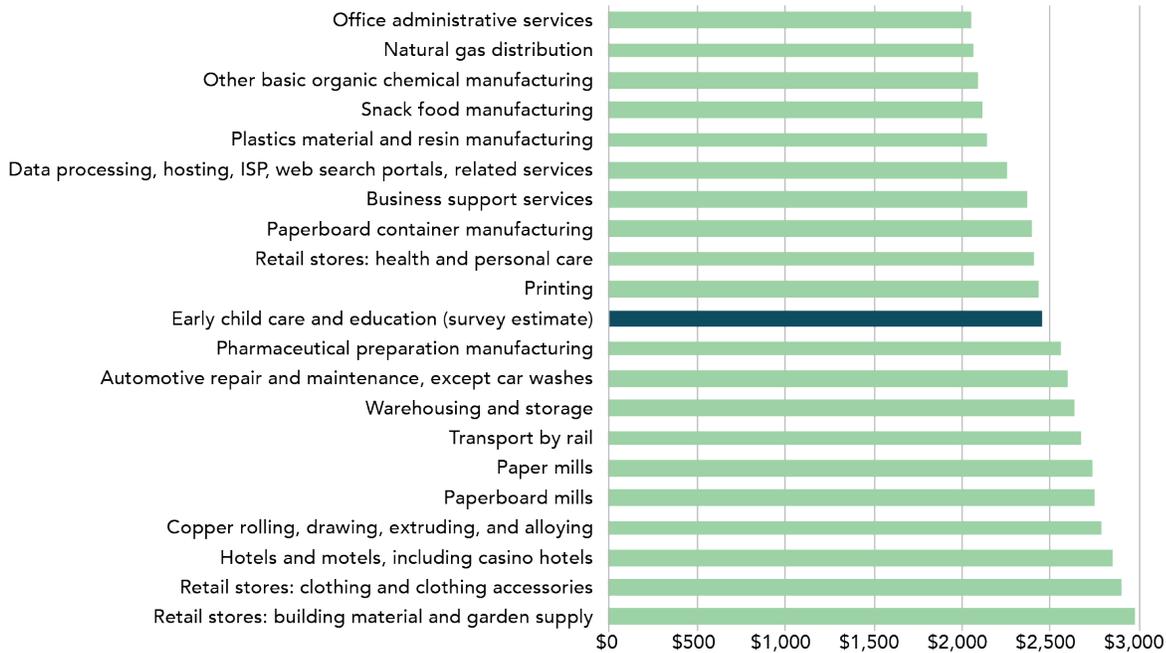
Parent Fees	\$1,580,497,526
Federal and State Funding	\$855,670,814
Charitable Contributions	\$16,931,660
Total Gross Receipts	\$2,453,100,000

INDUSTRY COMPARISON USING GROSS RECEIPTS

Context is needed to comprehend what the number \$2.45 billion in gross receipts means for Georgia. Thus, this section compares the early care and education industry’s gross receipts to those of other industries in the state, which is no easy task. Data available through the US Economic Census are years older than the survey period and predate the recent Great Recession. As discussed earlier in this chapter, the census understates the size of the industry’s gross receipts because neither child care businesses operated by a single self-employed individual nor public schools offering Georgia’s Pre-K are included nor are any charitable contributions or in-kind transactions. To more accurately compare this industry in Georgia to other industries, this analysis uses the \$2.45 billion in total gross receipts attributable to this industry as calculated using data from the Early Care and Education Economic Impact Survey and detailed in Table 2.8.

In terms of gross receipts, the early care and education industry in Georgia is comparable to other large industries in the state. Figure 2.2 shows that its gross receipts are similar to those of the pharmaceutical preparation manufacturing industry, the automotive repair and maintenance industry, and the printing industry.

Figure 2.2. Early Care and Education Industry Compared to Other Industries in Georgia

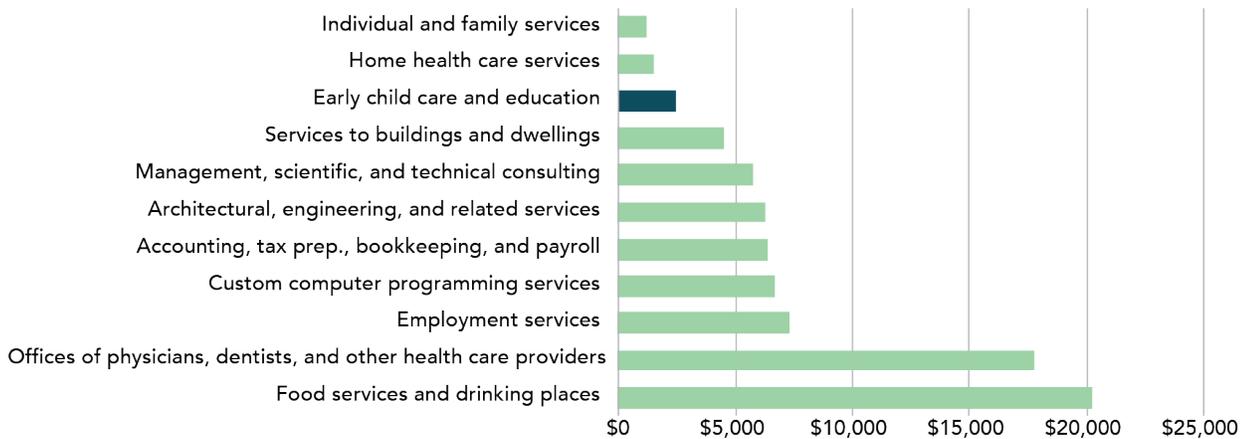


Notes: 2013 levels for all industries

Source: IMPLAN. Total gross receipts for the early care and education industry are calculated based on data from the Early Care and Education Economic Impact Survey. Dollars are in millions.

The Georgia Department of Labor (GDOL) Division of Workforce Statistics and Economic Research estimates expected growth for industries in Georgia between 2012 and 2022. Based on these estimates, the Child Day Care Services industry (excluding public schools) is expected to be one of the state’s 20 fastest growing industries. GDOL expects employment in this industry to grow 2.6% annually over this period. Figure 2.3 compares the total gross receipts of some of these other fast-growing industries to those attributable to the early care and education industry based on data from the Early Care and Education Economic Impact Survey.

Figure 2.3. Early Care and Education Gross Receipts Compared to Other Fast-Growing Industries in Georgia



Source: IMPLAN 2012 data adjusted to 2013 amounts. Total gross receipts for the early care and education industry are calculated based on the Early Care and Education Economic Impact Survey response data. Dollars are in millions.

Among other industries that are expected to have strong growth over the next few years, early care and education is currently larger than home health care services and individual and family services. It is also expected to have a higher average growth rate in employment than food services and drinking places, custom computer programming services, and services to buildings and dwellings. This industry is expected to see strong growth in employment in the upcoming years and is on par with some of the fastest growing industries in Georgia.

TOTAL ECONOMIC IMPACT

The early care and education industry’s gross receipts are an essential gauge of the industry’s economic value to the state, but they only show part of the picture. Gross receipts represent the amount of economic activity directly attributable to the early care and education industry and are a conservative way of estimating the industry’s economic impact. Programs in the industry also purchase items and services from businesses outside of the early care sector and these expenditures “multiply” or “ripple” through the economy as workers in many industries receive wages and spend some of their income purchasing even more goods and services.

As discussed, the industry generated \$2.45 billion in gross receipts in 2014, which reflects the industry’s direct spending. The IMPLAN modeling software includes estimates of the number, type, and size of other businesses related to the early care and education industry in Georgia.¹⁵ The IMPLAN software estimates what happens to spending in all of the associated industries when one more dollar of gross receipts is made in the early care and education industry. IMPLAN identifies two types of effects: indirect and induced. Indirect effects are the result of interindustry trade and refer to the increased economic activity associated with businesses that supply goods and services to the early care and education industry (e.g., food services, transportation services, office supplies). These sorts of expenditures increase total economic activity by an additional \$907 million per year in Georgia. The induced effects consist of increased household purchases of goods and services in the state by persons employed in

¹⁵ IMPLAN is a 440 sector input-output model used to measure the effects of three types of impacts: direct, indirect, and induced. The economic data for IMPLAN comes from the system of national accounts for the United States based on data collected by the US Department of Commerce, the US Bureau of Labor Statistics, and other federal and state government agencies.

the industry and by the businesses and individuals who do business with the industry; these effects are an estimated \$1.34 billion. When direct spending and indirect and induced effects are combined, the total short-term economic impact from the industry over a 12-month period is an estimated \$4.7 billion (see Table 2.9).

Table 2.9. Total Annual Economic Impact of the Early Care and Education Industry in Georgia (in \$billions)

	Direct Effect: Gross Receipts	Indirect Effect	Induced Effect	TOTAL Economic Impact
Estimate	\$2,453	\$907	\$1,335	\$4,695

Source: Estimates based on gross receipts calculated from data provided by Georgia’s Early Care and Education Economic Impact Survey and the IMPLAN input-output economic model for the state of Georgia.

The degree to which one industry’s activity affects the economic activity of all other associated industries through induced and indirect effects is usually referred to as a “multiplier.” Mathematically, a multiplier represents the ratio of total to direct economic impact calculated for the IMPLAN economic model. The early care and education industry has an average multiplier of 1.91 for output and 1.26 for employment. This means that for every dollar of gross receipts in the industry, the indirect and induced effects result in an additional 91 cents of economic activity. IMPLAN estimates that based on the total of the induced and indirect effects, for every 100 jobs within the early care and education industry, another 26 jobs are supported in other industries. Through its own spending and employment as well as the spending and employment supported in other industries, the early care and education industry annually generates an estimated \$374 million in federal tax revenue and \$161.7 million in state and local tax revenues in Georgia.

CONCLUSION

This chapter provides a detailed estimate of the short-term economic impact of the early care and education industry in Georgia. This industry serves an estimated 337,024 children and provides child care for approximately 551,941 working parents each year. It provides 67,507 jobs within the industry and supports an additional 17,454 jobs in other market segments. Thus, a total of 84,961 jobs in Georgia are directly or indirectly supported by the early care and education industry. The industry has \$2.45 billion in gross receipts, more than 60% of which comes from parent fees. The remainder of the industry’s gross receipts come from state and federal funding and charitable contributions. This spending supports an additional \$2.24 billion in economic activity in the Georgia economy through indirect and induced effects. The total annual economic impact of the industry is approximately \$4.7 billion.



Chapter Three Early Care and Education Industry Profile 2015

The early care and education industry in Georgia is an important economic driver, touching the lives of hundreds of thousands of families in every part of the state, employing more than 67,000 workers, and generating millions of dollars in tax revenues each year. This chapter offers a profile of the current early care and education industry in the state. For the purposes of this chapter, the industry comprises the three types of early care and education programs that were surveyed for this study: child care learning centers, family child care homes, and public schools that house Georgia's Pre-K classrooms.

The chapter focuses on three key aspects of the industry: the needs of children and families served, the early care and education workforce and the associated wages, and the characteristics of the early care and education programs. These three aspects depict a robust industry that meets critical family needs—while often struggling within tight budget constraints. The needs of children and families, resources available from families and the community, and competition among programs for qualified teachers offer significant opportunities and challenges to these organizations as businesses. This chapter explores these dynamics and how they interact.

Demographic information included in this chapter is based on data collected by Georgia's Early Care and Education Economic Impact Survey, a detailed survey of the population of Georgia's early care and education programs conducted in 2014 and 2015 as well as some comparative data from the US Census Bureau. The survey data fill gaps in knowledge about the industry not available from any existing source. The data acquired through the responses from 3,268 center care learning centers, public school-based Georgia's Pre-K programs, and family child care homes supplied important input for the economic analysis detailed in the previous chapter as well as presenting a profile of the early care and education industry in Georgia.

Among the findings presented in this chapter, a few capture the strengths of and challenges faced by this industry.

- Centers, family child care homes, and schools serve children of need. Among school-based Georgia's Pre-K programs, an average of 69% of children receive free or reduced-price lunch at school. Among responding centers, an average of 36.6% of children receive meals subsidized by the federal Child and Adult Care Food Program (CACFP), as do 70.6% of children in responding family child care homes.
- More than 80% of centers and 95% of family child care homes operate on a 12-month basis; at least 13% of family child care homes and 10.2% of centers offer care on Saturdays, Sundays, or holidays.
- The median weekly parent fee for infants ranges from \$85 to \$135 for family child care homes and from \$90 to \$179.50 for centers depending on geographic area.
- The median wage for administrators in centers is \$15 per hour; lead teachers earn a median of \$9 to \$16 per hour (depending on the age group taught); and assistant teachers earn a median of \$8.23 to \$9 per hour. In family child care homes, the median hourly wage for paid assistants is \$8. In school-based programs, administrators/directors earn a median wage of \$64.78 per hour; lead teachers earn a median of \$27.64 per hour; and assistant teachers earn a median of \$11.04 per hour.
- Paid holidays, paid leave, free or reduced-price care for dependents, and paid time off for training are among the benefits most often provided by child care learning centers. Health insurance, paid leave, retirement plans, and paid time for training and education are among the benefits most often provided by public schools.
- The industry serves children with diagnosed disabilities and children who have a first language other than English. The industry cares for and educates children of all races and children of Spanish, Hispanic, or

Latino ethnicity. The percentage of Non-Hispanic White children enrolled in early education programs is slightly lower than their proportion in the overall population. The percentage of Non-Hispanic Black children enrolled in early education programs is higher than their proportion in the state's population.

- Approximately 26% of center directors have associations with local businesses to obtain referrals, subsidies, or incentives for employees who enroll their children. Nearly 31% of center-based businesses and 10.9% of family-based providers care for “some” (1% to 49%) children whose tuition or fees are paid by a family member's employer. Another 8.4% of family-based providers care for children with “most” or “all” of their fees paid by an employer.

This chapter first describes the children currently served in Georgia early care and education programs and the needs of these children. Next, it looks at the workforce serving these children in child care learning centers, family child care homes, and Georgia's Pre-K programs housed in public schools. Particular attention is paid to the wages earned by these workers and the benefits offered to them. Finally, this chapter examines programs' resources, their opinions about the sufficiency of available community resources, their biggest business challenges, and new sources of revenue.

The survey methodology and a more detailed report of the findings, including regional breakdowns of the results when feasible, are provided in Supplemental Appendix A.

NEEDS OF CHILDREN SERVED BY GEORGIA'S EARLY CARE AND EDUCATION PROGRAMS

As estimated in Chapter 2, the industry provides care for 337,024 children annually. The following three broad categories of early care and education programs received slightly modified versions of the Early Care and Education Economic Impact Survey:

- **Child care learning centers**, defined in Chapter 1, include for-profit and not-for-profit organizations. For the purposes of the survey, they also include group child care homes, Early Head Start and Head Start programs, and military early care and education centers.
- **Family child care homes** are defined in Chapter 1.
- **Public school-based care** is defined as classrooms within local school systems that offer the Georgia's Pre-K Program for four year olds.

Characteristics of Children Served by the Industry

Children attend child care learning centers, family child care homes, or schools located throughout Georgia. (For further details, see Appendix A, Table A.2) According to survey responses, even though child care learning centers compose approximately 51.4% of the state's programs, they serve approximately 85% of the children in care (Table 3.1). Public school-based Georgia's Pre-K programs compose 12.2% of the state's programs, and they serve 11.2% of the children in care. Family child care homes compose 36.4% of programs but serve only 3.8% of the state's children in care. This latter figure (3.8%) is low relative to the portion of Georgia programs represented by family child care homes (36.4%) because each family child care home may care for a maximum of six children for pay. In contrast, child care learning centers are licensed to serve significantly more children (19 to 250 or more).

Table 3.1. Estimated Number of Children in Licensed Child Care in Georgia by Program Type

Program Type	Estimated Number of Programs in Georgia		Estimated Number of Children in Care in Georgia by Program Type	
	N	%	N	%
Child Care Learning Centers	3,254	51.38%	286,452	84.99%
Family Child Care Homes	2,308	36.44%	12,807	3.80%
Public Schools	771	12.17%	37,765	11.21%
Total	6,333	100.0%	337,024	100.0%

Availability of Child Care

Approximately 80% of the programs that responded to the survey are located in urban areas (counties with populations above 35,000), and 20% are located in rural areas (Table 3.2). Among the study’s responding programs, 83.1% of the children enrolled in care are located in urban areas and 16.9% in rural areas.

The US Census estimated that in 2010, 75.1% of Georgia’s residents lived in urban areas and 24.9% in rural areas (US Census 2012). US Census data also indicate that 65.6% of children under six years old in Georgia’s urban areas live in households in which all parents work. The figure for rural Georgia is only slightly smaller, 63.7%. Although numerous factors may affect the need for child care in rural areas (e.g., population density, distance), if children ages birth to 13 are proportional to Georgia’s total population, these figures indicate that rural areas may need more providers than currently exist (US Census Bureau 2009–2013 5-Year American Community Survey).

Table 3.2. Location of Responding Programs in Georgia

Type of Program	Rural		Urban		Total	
	Number	Percent	Number	Percent	Number	Percent
Child Care Learning Centers	277	18.5%	1,219	81.5%	1,496	100.0%
Family Child Care Homes	261	22.3%	912	77.7%	1,173	100.0%
Schools	118	19.7%	481	80.3%	599	100.0%
Total	656	20.1%	2,612	79.9%	3,268	100.0%

Schedules Meet Needs of Children and Their Families

In Georgia, most men and women engaged in the labor force work full-time and year-round (US Census Bureau 2011–2013 American Community Survey). In addition, as the state recovers from its highest unemployment rates in a generation, families may not always be able to find a traditional 9:00 a.m. to 5:00 p.m. schedule. Thus, an important question is whether early care and education programs are accommodating parents’ work schedule needs.

More than 80% of centers and 95% of family child care homes operate on a 12-month basis. Georgia's Pre-K programs based in public school systems are generally available for nine months of the year, as are 16.8% of centers and 3.4% of homes. Most of the remaining child care learning centers and family child care homes operate 10 to 11 months of the year. Nearly all of the responding center- and family-based providers offer care Monday through Friday. However, at least 13% of family child care homes and 10.2% of centers offer care for children on Saturdays, Sundays, or holidays. Family child care homes are three times more likely than centers to offer evening care—20.6% versus 7.7%. Finally, programs are open on average 9.2 to 13.6 hours on the days that they are open.

Programs appear to be accommodating families' needs by offering full-day, year-round services; 81.1% of children in child care learning centers and 85.3% of children in family child care homes are in full-time care. Furthermore, the percentages of children who attend on weekends, in the evening, or overnight are greater in family child care homes than in child care learning centers. Thus, family child care homes appear to be meeting off-peak demand for child care, whereas a variety of factors may constrain many centers from operating during off-peak times.

Licensed Capacity and Current Enrollment

Comparing capacity of programs with their enrollment provides some indication of whether the availability of early care and education is meeting families' demand for it. Median enrollment in respondents' child care learning centers is 77 children, whereas centers' estimated median capacity is 102 (Appendix A, Table A.21). In contrast, median enrollment in family child care homes is six, which is also their capacity.¹⁶ State regulations do not allow family child care homes to receive payment for more than six children.

The difference between the licensed capacity in the child care learning centers and the enrollment does not necessarily indicate excess supply in Georgia. Licensed capacity in child care learning centers is determined by square footage, and some facilities may not be designed to hold their allowable number of children due to room configurations. The difference between capacity and enrollment also may stem from some programs choosing to care for fewer children than are legally permitted in the facility. For example, accreditation standards require lower enrollments than the licensed capacity, so some programs voluntarily choose to limit enrollments to meet the standards. In addition, class sizes may be smaller than space would allow in order to accommodate the needs of younger children, especially infants. Although Georgia's unemployment rate has declined substantially since the end of the Great Recession, it continues to exceed an optimal level. Demand for child care may also be softer than expected because of workers' continued low wages (The Economist 2015). Low wages can dampen demand for formal early care and education services by forcing families to seek informal care or keeping some potential workers out of the labor force.

On the other hand, 66.7% of child care learning centers and 60.3% of family child care homes report that they maintain a waiting list. Centers report a median list of three names, and homes a median list of one name (Appendix A, Table A.25). Note that waiting lists are not a perfect indicator of excess demand because most families put their children's names on multiple waiting lists. Additionally, a program might, for example, have a waiting list for infants but several available slots for other age groups.

Care for Children with Extra Economic and Other Needs

The state and federal governments provide services and subsidies for children through a variety of programs. Families qualify for services based on specific eligibility guidelines. The survey asked about the participation of children in three such programs:

- **Federal nutrition programs**, which subsidize the cost of providing nutritious meals and snacks. Some early care and education programs offer meals that are subsidized by the US Department of Agriculture's Child

¹⁶ The capacity of schools is indeterminate because schools are not licensed and capacity is thus not estimated.

and Adult Care Food Program (CACFP) or Summer Food Service Program (SFSP). Public schools offer meals that are subsidized by the US Department of Agriculture’s National School Lunch Program.

- **Childcare and Parent Services (CAPS)**, which subsidizes a portion of the cost of early care and education for low-income working families. CAPS is funded through the federal Child Care and Development Fund and state matching funds.
- **Babies Can’t Wait**, Georgia’s early intervention program for children under the age of three years who have disabilities, developmental delays, or chronic health conditions. Babies Can’t Wait is established by Part C of the Individuals with Disabilities Education Act (IDEA).

Table 3.3 shows the percentage of children receiving each of these services. Statewide, the percentage of children in school-based Georgia’s Pre-K programs who receive free or reduced-price lunch is 68.9% among schools that responded to the question. Children in family child care homes are more likely to receive CACFP subsidies and services from Babies Can’t Wait than are children in child care learning centers. They are about equally as likely to receive CAPS subsidies.

Small percentages of children in all three child care settings have a diagnosed disability (2.8% in centers, 6.7% in schools, and 3.8% in family child care homes). See Appendix A, Table A.7 for more details. Similarly, small percentages of children were reported to have received services from Babies Can’t Wait: 0.9% of children in reporting child care learning centers and 2.2% in family child care homes (Appendix A, Table A.8).

Table 3.3. Percentage of Children in Early Care and Education Programs That Receive Federal or State Services

	National School Lunch Program*	CACFP+	CAPS†	Babies Can’t Wait
Child Care Learning Centers	Not applicable	36.6%	19.7%	0.9%
Family Child Care Homes	Not applicable	70.6%	20.2%	2.2%
School-based Care	68.9%	Not applicable	Not applicable	Not applicable

* All school respondents answered this question or an estimate was available.

+ Approximately 10% of surveyed programs did not respond to this question.

† Approximately 6.3% of surveyed programs did not respond to this question.

Racial Background of Children in Care

The early care and education industry in Georgia serves children of all races and ethnicities. Table 3.4 shows the racial categories of the children attending child care learning centers, family child care homes, and public school-based programs, based on survey responses. Non-Hispanic White children account for the largest percentage of students in child care learning centers (40.5%) and school-based programs (43.2%). In contrast, Non-Hispanic Black children make up the majority of children served by family child care homes (51.7%).

Although Non-Hispanic White children make up 44.7% of Georgia’s population of children age 13 and younger, according to the US Census, they account for approximately 40% to 43% of the children served by the state’s early care and education industry. According to the respondents, Non-Hispanic White children compose 40.5% of

children at child care learning centers and 39.9% of children at family child care homes. They are thus slightly underrepresented in these two types of care and nearly proportionally represented in school-based Georgia’s Pre-K programs, where they compose 43.2% of the children. Non-Hispanic Black children compose 33.1% of Georgia’s population of children age 13 and younger, according to the US Census, but they account for 38.8% to 51.7% of the children served by the state’s early care and education industry (US Census Bureau, Population Division 2015). Thus, Non-Hispanic Black children are overrepresented in each type of care because, according to respondents, Non-Hispanic Black children account for 38.8% of children in child care learning centers, 51.7% of children in family child care homes, and 40.5% of children in school-based Georgia’s Pre-K programs.

The differences between the representation of Non-Hispanic White and Black children in the population and their representation in the state’s early care and education industry could result from differences in the use of and demand for early care and education among various racial/ethnic groups, or they may reflect a difference in the rates of survey response by race. Of the family care home owners who responded, 53% are Non-Hispanic Black and 38% Non-Hispanic White. Approximately 81% of the responding Non-Hispanic Black owners care mostly for Non-Hispanic Black children (4.9 on average), and 81% of the responding Non-Hispanic White owners care mostly for Non-Hispanic White children (5.4 on average). This may reflect the geographic distributions of the early care and education programs since families tend to select programs in the communities where they live.

Table 3.4. Racial Composition of Child Population Served by Georgia’s Early Care and Education Industry

	Non-Hispanic White	Non-Hispanic Black	Hispanic	Non-Hispanic Asian	Other
Child Care Learning Centers	40.5%	38.8%	6.9%	3.5%	6.2%
Family Child Care Homes	39.9%	51.7%	4.3%	1.7%	9.5%
School-based Care	43.2%	40.5%	14.6%	2.3%	4.2%

Source: Georgia’s Early Care and Education Economic Impact Survey

Note: The percentages do not sum to exactly 100% because some respondents did not complete the survey information for all five race/ethnicity groups.

According to the 2014 American Community Survey, 13.6% of individuals in Georgia above age five speak a language other than English at home (US Census Bureau/American FactFinder 2014a). In comparison, Georgia child care providers indicate that 6.2% of children in center-based care, 3.2% of children in family-based care, and 10.5% of those attending school-based Georgia’s Pre-K programs speak a language other than English at home (Appendix A, Table A.9).

PROFILES OF EARLY CARE AND EDUCATION PROGRAMS AND THE WORKFORCE IN GEORGIA

The early care and education industry in Georgia directly employs more than 67,000 men and women across the state. These employees work in a variety of jobs including as administrators and owners, teachers, assistant teachers, clerical and other office staff, kitchen staff, drivers, and specialists that provide services for children with spe-

cial needs or technical assistance to providers. This section provides details about this workforce, including where they are employed, the wages they earn, the benefits they receive, and some general demographics.

Number of Employees

The programs that responded to Georgia's Early Care and Education Economic Impact Survey report a workforce of more than 25,000 (See Appendix A, Table A.32). For the short-term economic impact analysis conducted in Chapter 2, the figures reported in Appendix A, Table A.32 were used to estimate a total statewide workforce of 67,507 individuals, which represents both survey respondents and nonrespondents. Child care learning centers in Georgia have an average of 16 employees (median = 13, see Appendix A, Table A.33). For school-based programs, the average number of employees is 5 (median = 4). Approximately 26% of the responding family child care homes report employing part-time or full-time paid assistant or substitute teachers. Of those programs, the vast majority have one assistant.

The majority of staff at centers (79%) and schools (95.5%) are lead teachers and other teaching staff (Appendix A, Table A.33). Except for "other teaching staff," center staff generally work full-time, with the median ranging between 36 and 40 hours per week (Appendix A, Table A.36). Paid assistants in family child care homes, on the other hand, work a median of 25 hours per week.

Based on these proportions, of Georgia's 67,507 child care workers, 76.3% or 51,495 people are engaged in teaching, as lead or assistant teachers or other teaching staff (Appendix A, Table A.32).

Staff Turnover

Staff turnover is an often-mentioned concern of this industry because of its impact on children, especially if temporary substitute teachers are hired until a permanent position is filled. Research shows that a key to providing quality child care programs is the retention of staff members, particularly teachers and administrators (e.g., Porter 2012). Additionally, turnover can be costly for early care and education programs because of the expense involved in training new staff in areas such as curriculum, best practices, health, and safety.

Based on survey data, staff turnover among centers in Georgia is high: 80% of all responding centers and 93% of all responding schools report having had one or more permanent employees leave during the year prior to the survey, with an average turnover of five employees for each type of program (Appendix A, Table A.34).

Turnover among family child care home paid assistants is far lower: 16% of responding home operators report that one or more paid assistant caregivers left during the previous year, not including temporary or seasonal staff. The lower turnover rate is likely due to the fact that only 26% of responding family child care homes employ any permanent paid assistants.

Not included in the turnover numbers are seasonal or temporary employees. However, 37% of responding centers report employing seasonal or temporary employees. Of those that do, the average number of temporary employees is five.

Wages Earned

Chapter 2 showed that, based on estimates from the US Bureau of Labor Statistics, wages paid to those working in Georgia's early care and education industry are relatively low compared to other states outside of the South and to industries with similar economic impact. This section uses survey data to delve further into the wages earned by the state's early care and education workforce. Wages of center- and home-based employees differ quite substantially from those of staff of public schools offering Georgia's Pre-K. Wage schedules of school systems and requirements of school employment differ from those of centers and family child care homes. For example, school-based

Georgia’s Pre-K programs tend to require their employees to have higher levels of education and credentials than do child care learning centers or family child care homes (See Education Level of Staff for details).

Table 3.5 reports the median hourly wages received by center and school employees by category. In child care learning centers, Georgia’s Pre-K and Head Start lead teachers and administrators/directors earn the highest statewide median wages at \$16 and \$15 per hour, respectively. Specialists have a median wage of \$12 per hour, and clerical staff \$10. For most positions, median wages are slightly higher in urban areas. The median wage of paid assistants in family child care homes (not shown) is \$8.00, similar to centers’ median wages for assistant non-Georgia’s Pre-K teachers.

Table 3.5. Median Hourly Wages for Early Care and Education Staff in Centers and Schools, Rural, Urban, and Full State

	Centers			Public Schools		
	State	Urban	Rural	State	Urban	Rural
Administrators/Directors	\$15.00	\$15.00	\$12.00	\$64.78	\$68.78	\$56.68
Assistant directors	\$11.00	\$11.00	\$10.00			
Lead teachers (excluding Georgia’s Pre-K and Head Start)	\$9.00	\$9.36	\$8.00			
Lead teachers, Georgia’s Pre-K or Head Start	\$16.00	\$16.00	\$16.38	\$27.64	\$27.10	\$31.88
Assistant teachers (excluding Georgia’s Pre-K and Head Start)	\$8.23	\$8.50	\$7.75			
Assistant teachers, Georgia’s Pre-K or Head Start	\$9.00	\$9.00	\$9.50	\$11.04	\$11.04	\$11.77
Other teaching staff	\$8.00	\$8.35	\$7.65	\$34.82	\$34.82	
Specialists	\$12.00	\$12.00	\$12.00	\$34.92	\$34.92	
Clerical staff	\$10.00	\$10.00	\$8.50	\$20.35	\$20.35	\$18.13
Other staff	\$9.00	\$9.00	\$8.50	\$12.98		

Among the responding public schools offering Georgia’s Pre-K, wages vary somewhat between urban and rural areas. Among these schools, the highest wages are earned by administrators, followed by other teaching staff and specialists. Specialists in these schools typically have unique skill sets and are likely to be compensated for those skills. For example, early interventionists, special education teachers, and resource specialists associated with federal programs like Head Start deliver comprehensive services to children and their families that are not available in all early care and education settings. Considering the differences in wages between types of providers, it is not surprising that child care learning centers and family child care homes compete with schools for qualified employees.

Benefits Offered

Benefits available to employees, such as health insurance, paid leave, retirement plans, and paid time for training can help attract and retain employees. Figures 3.1 and 3.2 show the percentages of programs that offer full-time and part-time staff any of the listed benefits. The majority of child care learning centers offer at least some of their full-time staff some or all of a variety of fringe benefits. Centers most commonly offer paid time off (for holidays, vacation, or training), tuition reimbursement, and free or reduced-price care for dependents. Few family child care home providers offer benefits to their paid assistants; however, only 26% of family child care homes employ paid assistants. Nearly all public schools offering Georgia’s Pre-K provide health insurance, paid leave, retirement plans, and paid time for training and education to their full-time employees. Benefits offered may exacerbate the competition among providers for qualified employees.

Figure 3.1. Benefits Offered to Georgia’s Pre-K or Head Start Staff, by Program Type and Employment Status

Panel A. Full-time Employees

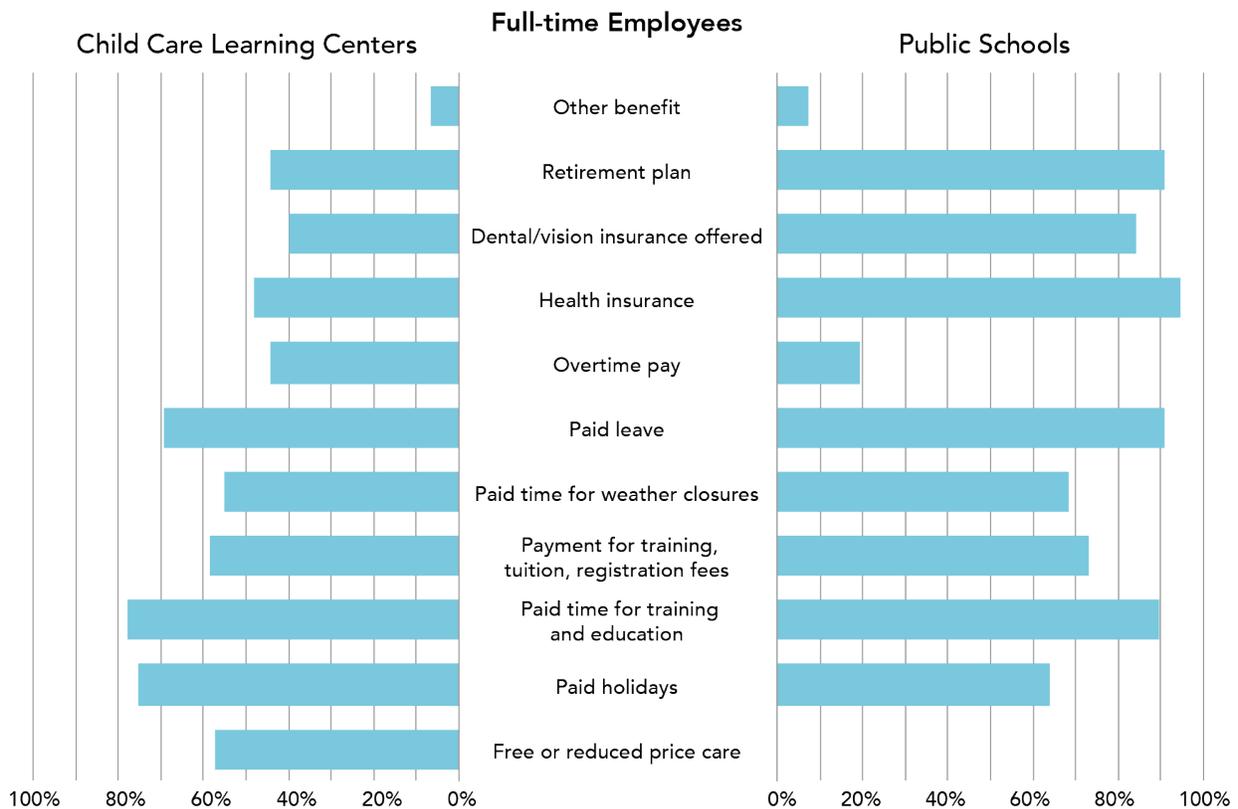


Figure 3.1. Benefits Offered to Georgia’s Pre-K or Head Start Staff, by Program Type and Employment Status, continued
 Panel B. Part-time Employees

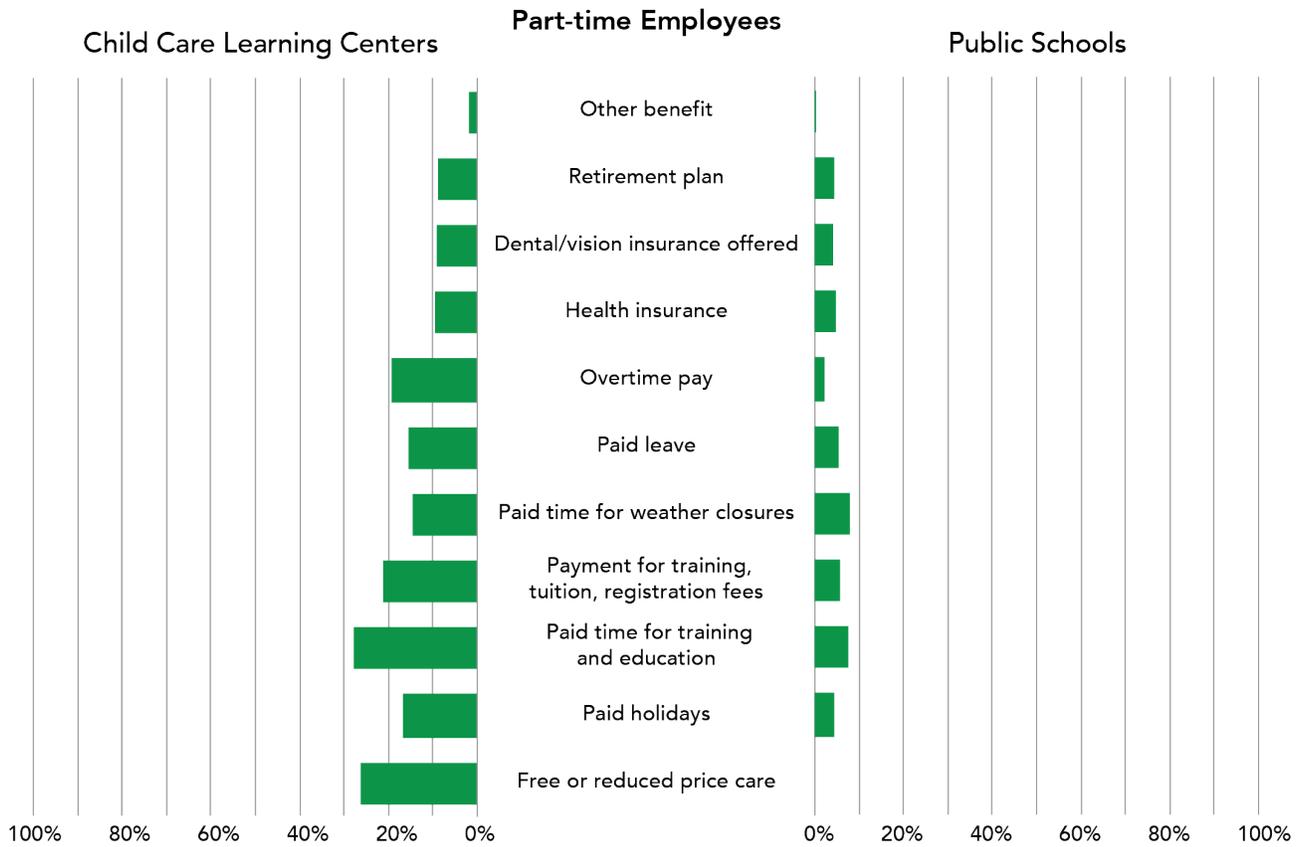


Figure 3.2. Benefits Offered to Staff at Child Care Learning Centers and Family Child Care Homes, by Employment Status (Excluding Georgia’s Pre-K and Head Start Staff)

Panel A. Full-time Employees

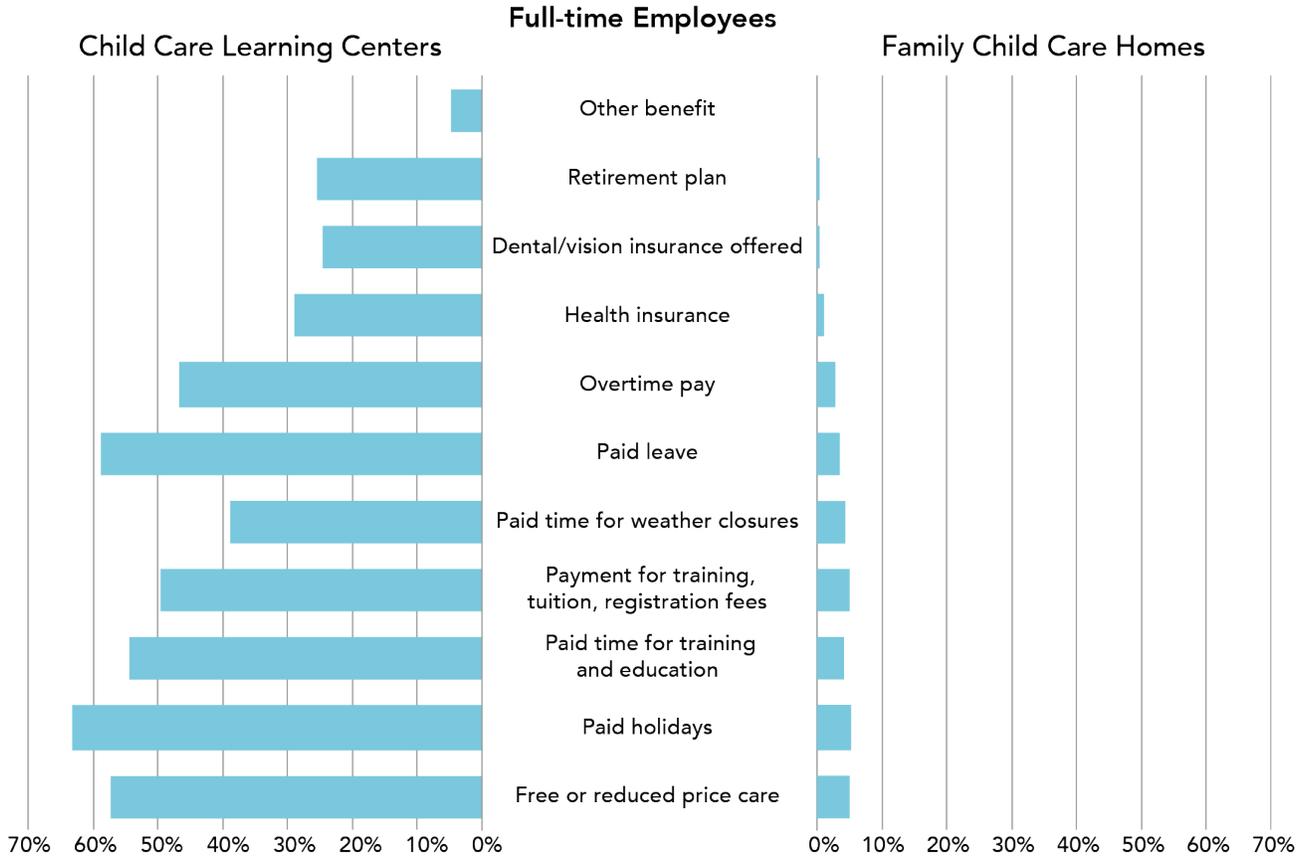
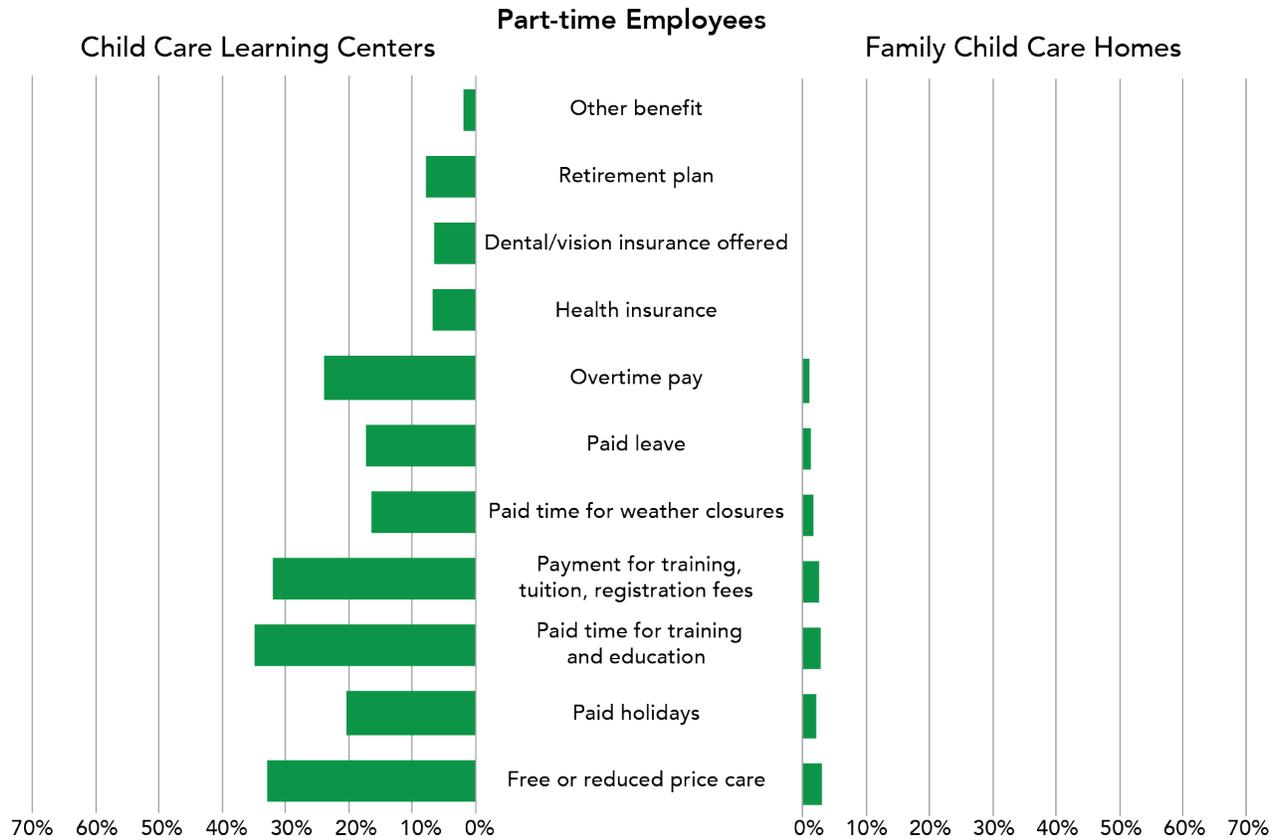


Figure 3.2. Benefits Offered to Staff at Child Care Learning Centers and Family Child Care Homes (Excluding Georgia’s Pre-K and Head Start Staff), by Employment Status, continued

Panel B. Part-time Employees



Education Level of Staff

Due to state licensing requirements, no early childhood educator should have less than a high school education.¹⁷ Congruently, the survey indicates that less than 12% of educators in each type of early care and education program fall into this category. The most recently required lead teacher credential is a Child Development Associate (CDA). The CDA rule became effective in 2012, and as of the 2014–2015 survey period, 4.5% to 22.2% of center employees (depending on position), 6.7% of paid assistants, and 14.5% of family child care home owners have the CDA as their highest degree (Appendix A, Tables A.46 and A.47). These are likely to be undercounts of those possessing a CDA because the survey asked programs to note the highest level of education of each employee and many employees may have earned a CDA before obtaining a higher degree.

On average, 54% to 74% of the lead teachers and other teaching staff in centers (depending on position) have some education beyond a high school diploma, as do 58% of responding family child care home owners and 42% of paid assistants (Appendix A, Tables A.46 and A.47).

¹⁷ Paid assistants in family child care homes are exempt from this requirement.

Not surprisingly, the early care and education staff based in public schools tend to have relatively high levels of education. Nearly all lead teachers and other teaching staff in schools have education beyond high school, as more than 85% have at least a bachelor's degree (Appendix A, Table A.46). In addition, all school-based lead teachers have a teaching certificate, mostly from Georgia (Appendix A, Table A.48). All school-based Georgia's Pre-K assistant teachers also have teaching certificates from Georgia (62%) or another state (38%).

In child care learning centers, 34% of administrators, directors, or specialists have a bachelor's degree or higher level of education, compared to 89% of their peers in schools.

At the time of the survey, many lead teachers were enrolled in college or technical college. An estimated 19.8% of all reported center-based lead teachers not teaching Georgia's Pre-K, 19% of family child care home owners/operators, and 20% of paid assistants were enrolled in college or technical college at the time of the survey. Large proportions of these teachers were enrolled in early childhood education degree programs (Appendix A, Table A.47).

In child care learning centers, lead teachers in Georgia's Pre-K classrooms tend to have higher levels of education than do other lead teachers. Center lead teachers are very likely to have some kind of specific curriculum training (26% to 68%) like Montessori, Creative Curriculum, or High/Scope (Appendix A, Table A.48). More than 20% of other center-based teaching staff and 26% to 70% of centers' lead teachers (depending on age group taught) have a teaching certificate from Georgia. Another 2.5% to 9.7% of center teachers have a teaching certificate from another state.

Of the family child care homes who reported such information, 28.3% of operators have a Georgia teaching certificate compared with 3.3% of the assistants.

Racial/Ethnic and Gender Composition of Staff

Table 3.6 shows the racial/ethnic composition of staff in various positions in the three types early care and education settings. Center-based staff are diverse in terms of race; among those responding, between 41% and 58% of the teachers in centers (depending on the position) are reported to be Non-Hispanic Black, and 33% to 51% to be Non-Hispanic White. Of the remaining center staff, the largest percentage in any one group tends to be Spanish, Latino, or Hispanic (2% to 7%, depending on position). In family child care homes, the majority of owners and paid assistants are Non-Hispanic Black (53% and 59%, respectively).

Among schools, nearly a supermajority of staff (between 57% and 88%) in all positions are identified as Non-Hispanic White. While the percentage of teachers and other staff reported as Hispanic ranges from 0% to 3%, nearly all remaining teachers, administrators, and other staff (10% to 39%) are reported to be Non-Hispanic Black.

Table 3.6. Racial and Ethnic Composition of Early Care and Education Staff, by Percentage

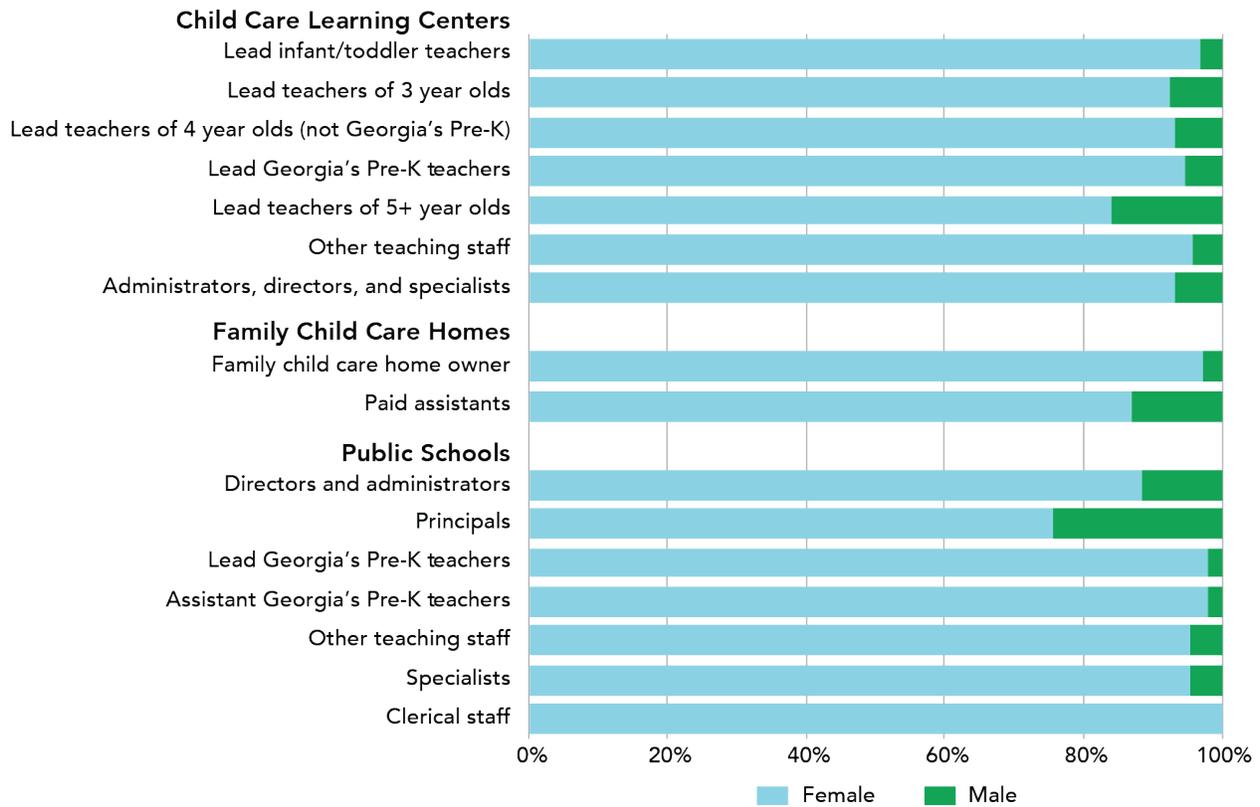
Type of Program	Positions	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Hispanic	Multi-Racial	Other Races
Child Care Learning Centers	Lead teachers of infants/toddlers	40%	52%	1%	5%	1%	1%
	Lead teachers of 3 year olds	37%	54%	1%	5%	1%	2%
	Lead teachers of 4 year olds (not GA Pre-K)	43%	45%	1%	7%	1%	2%
	Lead GA Pre-K teachers	51%	41%	1%	4%	2%	1%
	Lead teachers of 5+ year olds	33%	58%	1%	2%	1%	6%
	Other teaching staff	43%	48%	2%	5%	1%	1%
	Administrators, directors, and specialists	52%	41%	1%	4%	1%	1%
Family Child Care Homes	Family child care home owner	38%	53%	2%	3%	2%	2%
	Paid assistants	31%	59%	1%	2%	5%	2%
Schools	Directors and administrators	77%	21%	0%	1%	1%	1%
	Principals	64%	34%	0%	1%	0%	0%
	Lead GA Pre-K teachers	72%	26%	0%	2%	0%	0%
	Assistant GA Pre-K teachers	57%	39%	1%	3%	0%	1%
	Other teaching staff	80%	20%	0%	0%	0%	0%
	Specialists	88%	10%	0%	1%	1%	0%
	Clerical staff	73%	25%	0%	2%	0%	0%

Notes: Not all percentages sum to 100 because some respondents did not complete the survey question for all six race/ethnicity groups. For schools, the Other Races category includes Non-Hispanic Native Hawaiian or Other Pacific Islander and Non-Hispanic American Indian or Native Alaskan.

Figure 3.3 presents the gender breakdown of the early care and education workforce. In all categories, the vast majority of staff members are female. The staff positions most likely to be male are center-based lead teachers for older children (age 5+), school principals, school directors/administrators, and paid assistants in family child care homes. In regard to paid assistants, one possible explanation for the relatively high number of males may be that

they are the husbands or partners of the family child care home owners. Responses to a question asking family child care home owners what they do when they are too sick to work indicate that some rely on their husbands to fill in for them at times (Appendix A, Table A.41).

Figure 3.3. Gender Composition of Early Care and Education Staff



RESOURCES AVAILABLE TO EARLY CARE AND EDUCATION PROGRAMS

Annual Revenues of Providers in 2013

Chapter 2 calculated the total annual gross receipts of the early care and education industry in Georgia. This section describes the revenues from the perspective of child care providers. This analysis gives insight into how these businesses operate and the resources they access to care for hundreds of thousands of the state's children.

A few definitions help in understanding programs' business operations:

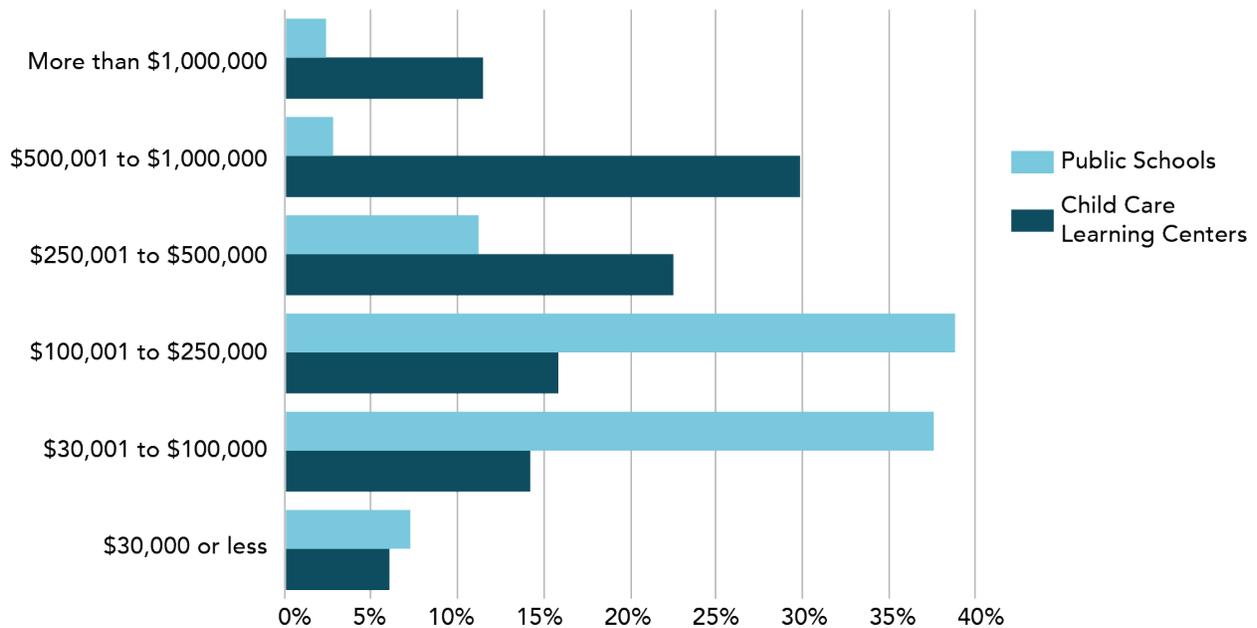
- **Net annual earnings:** all income received by a program minus all expenses including taxes
- **Gross annual earnings or revenues:** all income received by a program before any expenses or taxes are deducted
- **Median gross revenues per child:** gross earnings or revenues divided by the number of children enrolled at the time of the study. Half of the responding programs will have the same or less gross revenue per child than the median, and half will have the same or more.

In Georgia, the median annual gross revenues per child in care were \$4,734 for the entire sample of center-based providers, \$5,520 for the subset of centers offering Head Start (including Early Head Start) or Georgia’s Pre-K programs, and \$3,856 for the portion of centers that did not offer Georgia’s Pre-K or Head Start programs (Appendix A, Table A.26). Viewed in context, these revenues reflect the revenue per enrolled child at the midpoint of the revenues of all programs that reported revenues, and although half of the revenues per enrolled child are less than the median revenue, the lower revenues have a limit. In contrast, the half of programs reporting higher revenues may have much higher revenues than those of the middle program. Furthermore, these revenues include those received for part-time (e.g., before- or after-school) as well as full-time care and education. They include revenues of programs located in rural and urban areas and those derived from providing early care and education for children of various ages and needs. Furthermore, some programs may have underreported their revenues. Therefore, median annual gross revenues per child should not be assumed to be the actual cost of quality care or used as a basis for evaluating tuition rates. Sources of revenue are discussed in more detail below.

The median annual gross revenues were \$3,920 per child for family child care homes and \$3,512 per child for school-based Georgia’s Pre-K programs.

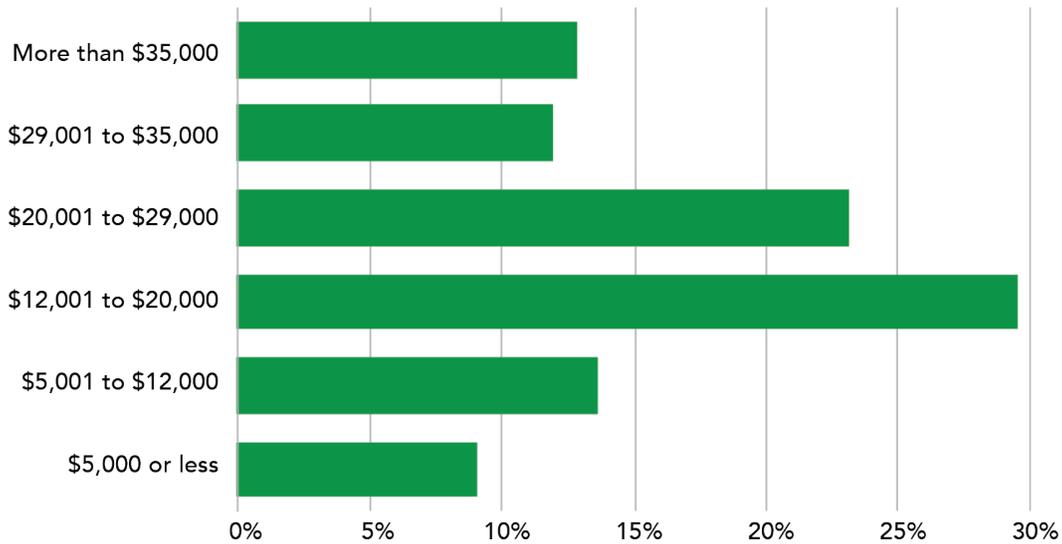
The average total annual revenues for centers were \$487,241, with a median of \$395,932. Figure 3.4 shows the distribution of gross revenues for center- and school-based programs. Note that the centers and schools with the highest revenues may actually represent multiple sites. The average annual revenues for schools offering Georgia’s Pre-K were \$181,677, with a median of \$142,273.

Figure 3.4. Distribution of Revenues Received by Early Care Learning Centers and by Schools Offering Georgia’s Pre-K



The average total gross annual revenues for family child care homes were \$21,768, with a median of \$20,000. The average total net annual earnings for family child care homes were \$11,386, with a median of \$10,000. Figure 3.5 shows the distribution of gross revenues for family child care homes.

Figure 3.5. Distribution of Revenues Received by Family Child Care Homes



Sources of Revenue

Early care and education programs receive revenues from a variety of sources. As found in Chapter 2, parent fees make up the majority of the funds received by providers in Georgia, totaling \$1.58 billion per year. Other sources of revenue include the federal nutrition programs, the federal CAPS child care subsidy, Head Start and Early Head Start funding, charitable contributions, Georgia’s Pre-K Program funding, and Quality Rated mini-grants. Some public schools also receive significant local funding.

Figure 3.6 presents the percentages of child care learning centers that report receiving any funding from any of 10 possible sources. Figures 3.7 and 3.8, respectively, show the percentages of family child care homes and school-based Georgia’s Pre-K programs that report receiving any funding from six possible sources.

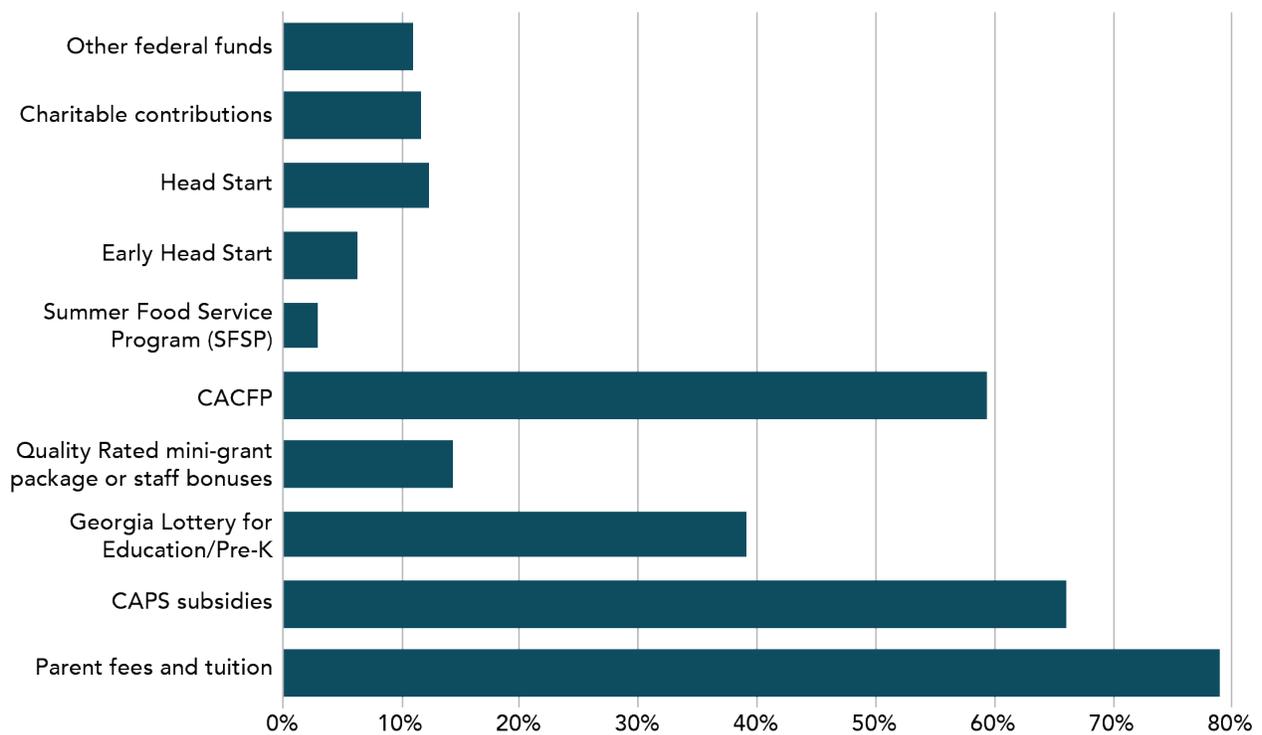
Nearly 80% of child care learning centers and 56.3% of family child care homes reported receiving parent fees and tuition. Parent fees and tuition compose most, 52.7%, of the gross annual revenue that these programs receive (Appendix A, Table A.29). For the 66.1% of child care learning centers with children receiving CAPS subsidies, they contribute an average of 8.8% to the centers’ revenue, and for the 38.4% of family child care homes serving such children, CAPS subsidies add 10.3% to their revenue.

CACFP is a significant revenue source for family child care homes, but less so for child care learning centers. Of the 68.9% home-based programs that reported receiving CACFP, the funding comprises an average of 34.8% of the program’s gross annual revenue. Among the 59.3% of center-based programs receiving CACFP, it accounted for an average of 6.3% of their gross annual revenue.

A substantial fraction of child care learning centers, 39%, reported receiving Georgia Lottery for Education/Georgia’s Pre-K funding. It accounts for 13.2% of these centers’ gross annual revenue, on average. Approximately 12% of child care learning centers claim to have received funding from Head Start, and 6.2% from Early Head Start. Together, Early Head Start and Head Start funds constitute 15.6% of these centers’ gross annual receipts, on average. While more than 10% of child care learning centers and 2.8% to 7.6% of family child care homes reported receiving funds from a Quality Rated mini-grant package or staff bonuses, other federal funds, charitable contributions, or other funds, these contribute 0.1% to 1.3% of the gross annual revenues of centers and 0.4% to 0.9% of such revenues of family child care homes, on average.

The Georgia Lottery for Education/Georgia’s Pre-K funds are school-based programs’ largest source of funding, accounting for 81.3% schools’ gross annual revenues, on average.¹⁸ Forty percent of the responding school-based programs reported receiving revenue to operate Georgia’s Pre-K from the local school system of which they were a part. On average, local school systems add 6.7% to these school-based programs’ annual gross revenues. Federal nutrition programs compose an average of 5.1% of the gross annual revenues of the 144 schools (24%) that reported revenues for meals of children attending Georgia’s Pre-K programs. Other sources of revenue, including local funds, other federal funds, CAPS subsidies, and other funds, account for 0.3% and 2.8% of schools’ gross revenue, on average.

Figure 3.6. Percentage of Child Care Learning Centers Receiving Program Revenues



¹⁸ Although 100% of the school-based programs in this study receive Georgia Lottery for Education/Georgia’s Pre-K funding, only 39.4% indicated such funding. For school programs not reporting such funding, the amount Georgia budgeted for each program was available and used in these calculations.

Figure 3.7. Percentage of Family Child Care Homes Receiving Program Revenues

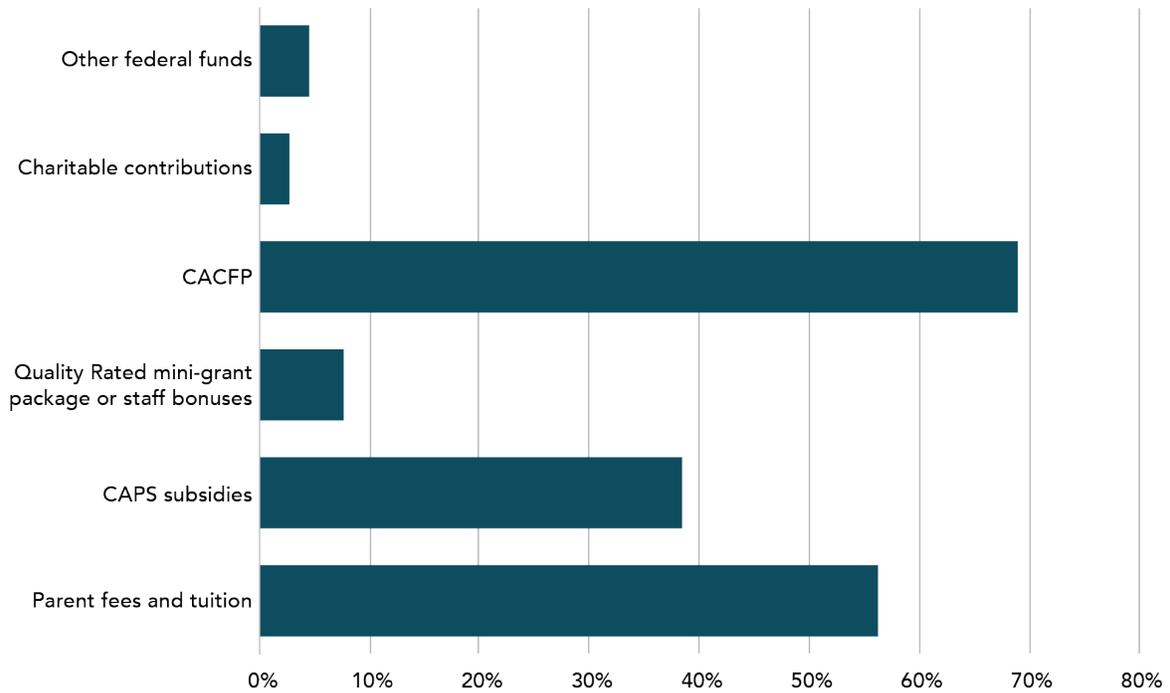
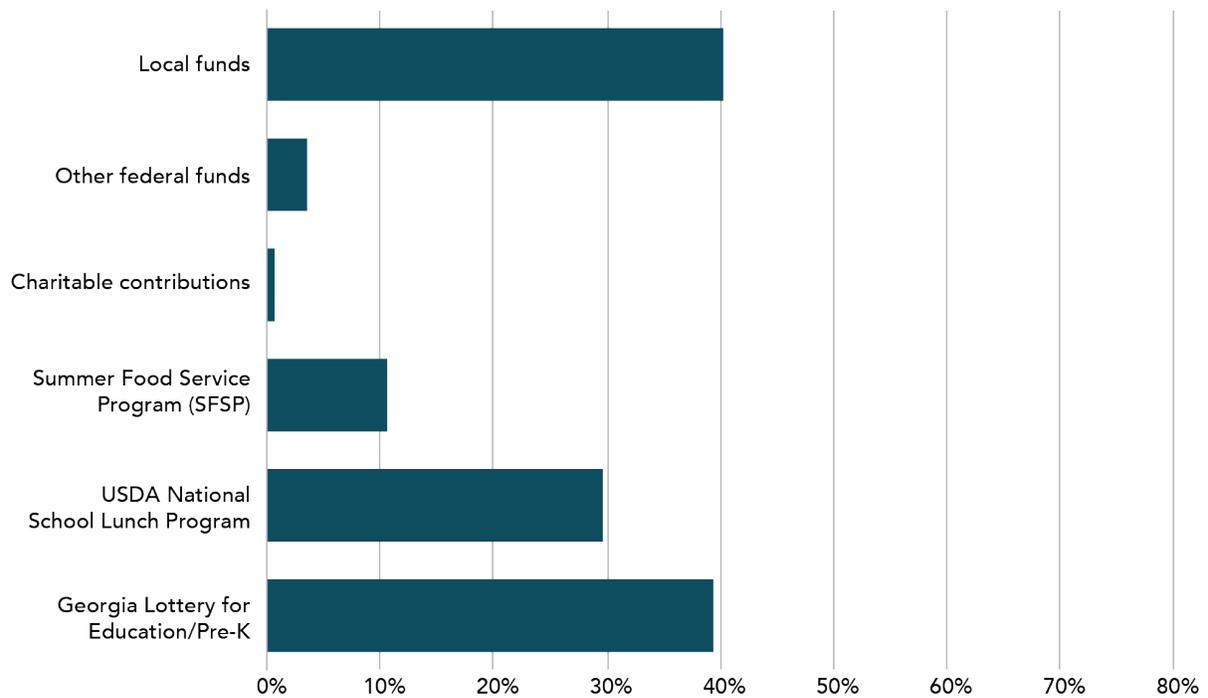


Figure 3.8. Percentage of Public Schools Receiving Program Revenues for Georgia's Pre-K Programs



Parent Fees

Table 3.7 reports the median base rate charged per week for care by program type and three broad geographic areas. Child care learning centers in the metropolitan Atlanta area have the highest fees for most age ranges. Family child care homes in rural areas have the lowest median fees for children four years old and younger; however, rural child care learning centers have lower median rates for children five years or older. For all program types, median fees are higher for younger children. These rates are similar to those reported in Georgia’s 2013 Child Care Market Rate Survey, which is a survey of child care programs conducted by the state biannually to determine subsidy rates.

To view these fees in context, the weekly median fee for a three-year-old child at a center is \$120 and at a family child care home is \$100. If the child were in care for 50 weeks per year (the parent has the standard two weeks of vacation per year), the total child care learning center fee would be \$6,000, and family child care home fee \$5,000. For married couples in Georgia with children under age 18 who have a median income of \$76,385, these child care fees would constitute approximately 7% to 8% of their income. In comparison, for men or women with children under age 18 but no spouse present, the lower fee would constitute 15% of the median man’s income of \$33,383 and 22.5% of the median woman’s income of \$22,191. Given that people tend to be younger when they have children, these parents would be more likely to earn an income below the median. If the relatively modest salaries of the child care and education workforce are an indication, providers may be trying to offer a service at prices that parents can afford. Therefore, the importance of the public subsidies to providers’ budgets is understandable.

Table 3.7. Median Weekly Parent Fees by Program Type, Child’s Age, and Geographic Area

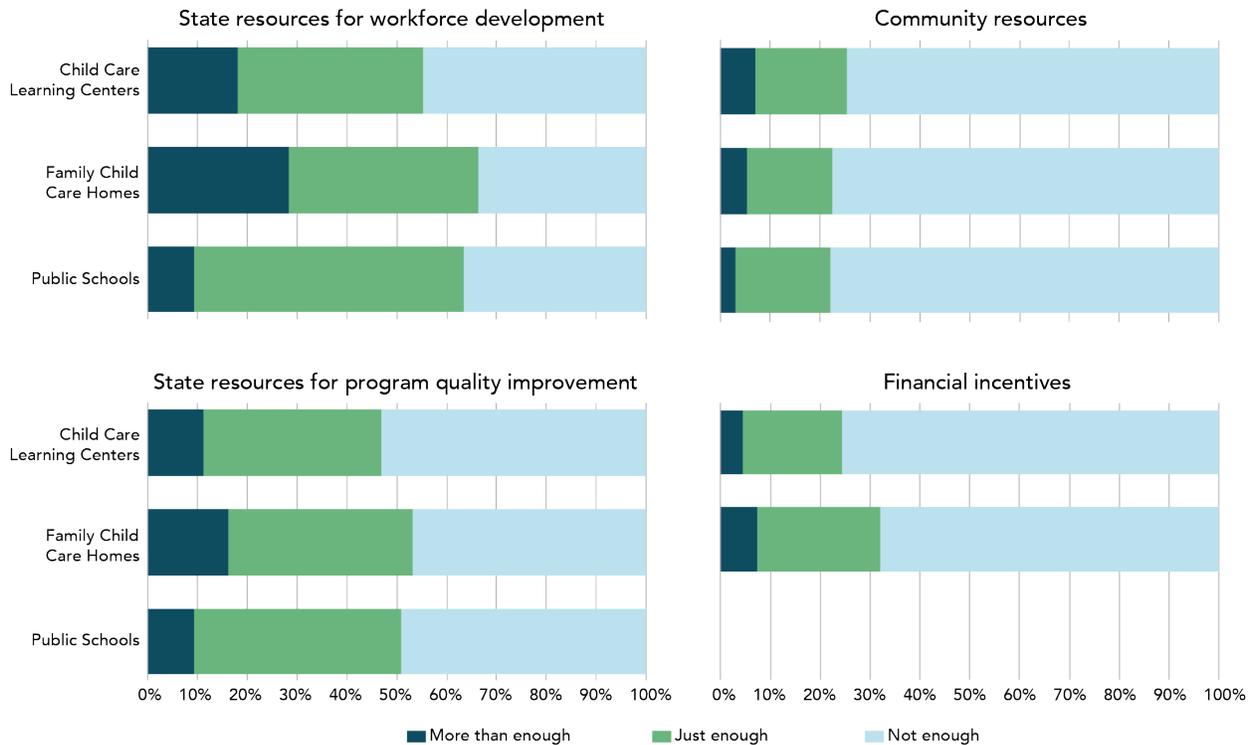
	Child Care Learning Centers				Family Child Care Homes			
	Metro Atlanta	Other Urban	Rural	State-wide	Metro Atlanta	Other Urban	Rural	State-wide
Under 6 months	\$179.50	\$120.00	\$90.00	\$140.00	\$130.00	\$100.00	\$85.00	\$110.00
6 months but less than 12 months	\$175.00	\$118.00	\$90.00	\$140.00	\$135.00	\$100.00	\$85.00	\$115.00
12 months but less than 18 months	\$169.00	\$113.00	\$90.00	\$133.00	\$125.00	\$100.00	\$80.00	\$105.00
18 months but less than 24 months	\$165.00	\$112.50	\$90.00	\$130.00	\$125.00	\$95.00	\$80.00	\$105.00
2 years but less than 3 years	\$160.00	\$110.00	\$90.00	\$130.00	\$125.00	\$95.00	\$80.00	\$100.00
3 years but less than 4 years	\$150.00	\$108.00	\$90.00	\$120.00	\$120.00	\$92.50	\$80.00	\$100.00
4 years but less than 5 years	\$145.00	\$100.00	\$85.00	\$114.00	\$110.00	\$85.00	\$75.00	\$95.00
5 years but less than 6 years	\$88.50	\$72.50	\$60.00	\$75.00	\$90.00	\$75.00	\$75.00	\$80.00
6 years to 13 years	\$75.00	\$65.00	\$50.00	\$68.00	\$75.00	\$70.00	\$65.00	\$70.00

Perceptions of Resources and Opportunities among Early Care and Education Programs in Georgia

Availability of Resources

Programs were asked if they felt there were more than enough, just enough, or not enough of four types of resources: state resources to develop their workforce, community resources for their center or home, state resources to improve program quality, and financial incentives to help support their business. In regard to the availability of state resources to develop their workforce, 55% of centers, 67% of family child care homes, and 63% of schools indicate there are “more than enough” or “just enough” resources (Figure 3.9). However, approximately three-quarters of respondents feel there are “not enough” community resources available. Similarly, half of respondents indicate there are “not enough” state resources to improve quality in their programs; approximately 36% to 42% of the remaining programs evaluate such state resources as “just enough” (depending on type of establishment). More than 67% of responding center- and family-based programs say there are not enough financial incentives to help support their business.

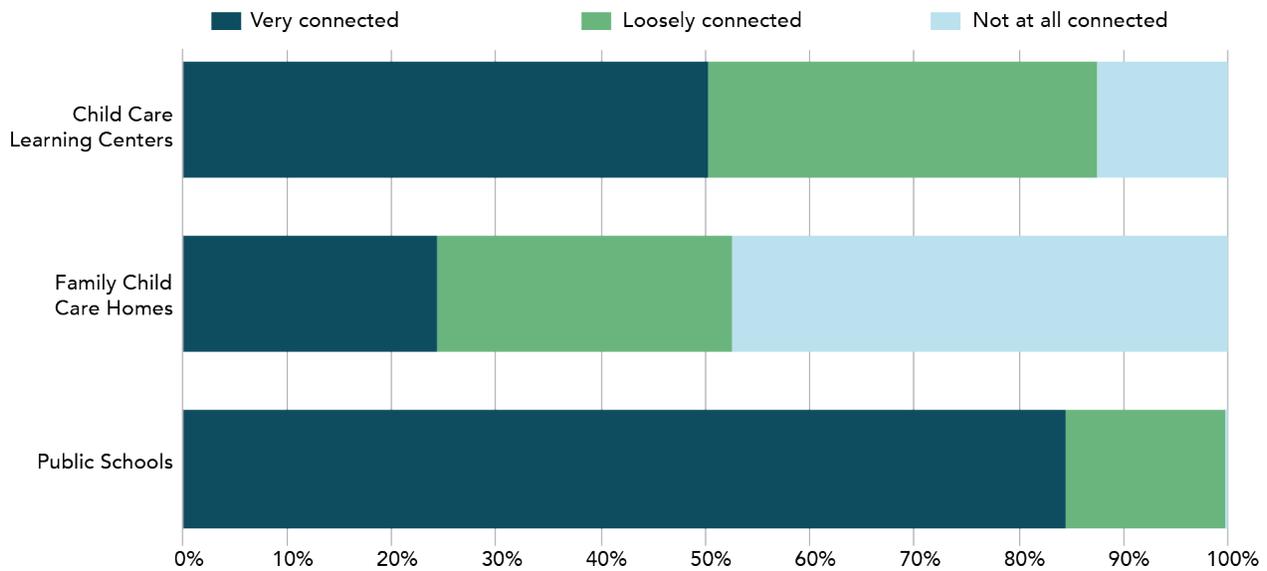
Figure 3.9. Are there more than enough, just enough, or not enough of each resource listed below?



Connections to Local Schools and Businesses — New Opportunities

The three types of programs view their level of connection with local schools that provide services for children with special needs, after-school care, and transition-to-school issues differently. Approximately 87% of center-based providers indicate they are “very” (50.2%) or “loosely” (37.2%) connected to local schools. In contrast, nearly half (47.3%) of family child care home providers describe their relationship with local schools as “not at all connected.” Not surprisingly, the vast majority (84.5%) of school-based Georgia’s Pre-K directors report feeling “very connected” with their school system’s services (Figure 3.10).

Figure 3.10. How connected is your center or home to the local schools that provide services for children with special needs, after-school care, and transition-to-school issues?

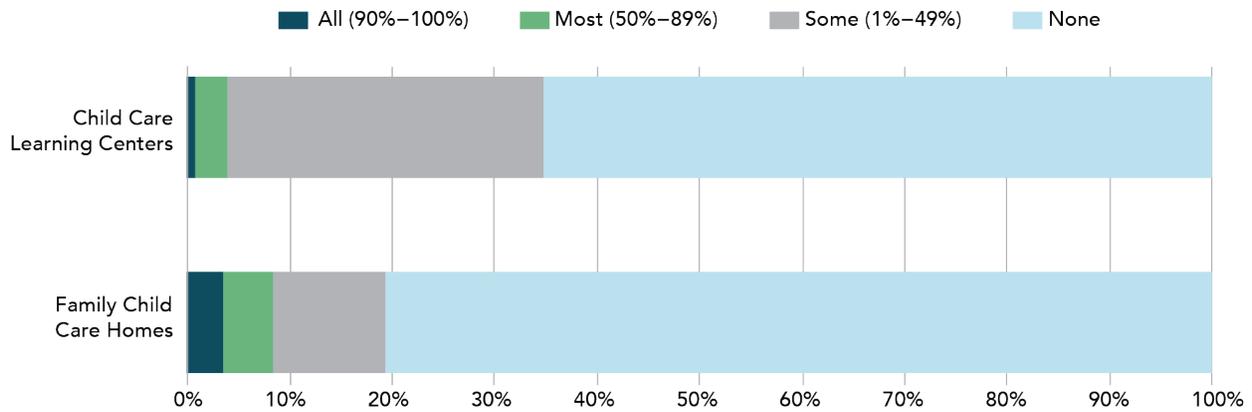


Connections to Local Businesses

Employer-supported child care has been discussed in the United States as an employee benefit for many years (e.g., Sloan Work and Family Research Network 2009), and some employers offer such benefits (Kass 2011; West Virginia University 2015). Based on survey responses, it seems that only a modest share of Georgia’s early care and education programs have direct connections with businesses or parents who receive employer tuition assistance with child care.

Only one-quarter (26.4%) of child care learning centers report having an association with a business that provides referrals, subsidies, or incentives for employees who enroll their children with that center (Figure 3.11). Although only 3.9% of responding centers and 8.4% of responding family child care homes report that all or most of the children in their care have some of their fees or tuition paid by a family member’s employer, 30.8% of centers and 10.9% of homes report having “some” children who receive at least some fees or tuition paid by a family member’s employer. Thus, 65.3% of centers and 80.7% of family child care homes serve no children with employer-paid fees or tuition.

Figure 3.11. What portion of the children at your child care learning center or family child care home have some of their fees or tuition paid by a family member’s employer?



CONCLUSION

This chapter provided a profile of the Georgia early care and education industry, highlighting the industry’s workforce and the children currently served and their needs. Data for this chapter were provided by Georgia’s Early Care and Education Economic Impact Survey, a unique survey conducted specifically for this report to fill gaps in knowledge about the industry.

Survey data show that most child care learning centers and family child care homes in Georgia operate on a 12-month basis. At least 13% of family child care homes and 10% of centers offer care on Saturdays, Sundays, or holidays. The schedules appear to accommodate needs of Georgia’s working parents, as most of the state’s labor force works full-time and year-round. Although family child care homes may have been operating at capacity in late 2014 and early 2015, centers may have had the capacity to serve additional children. The next chapter explores some of the recent demographic and population changes in Georgia that may help explain this possible extra capacity.

The median weekly parent fee for infants ranges from \$85 to \$135 for family child care homes and \$90 to \$179.50 for child care learning centers depending on geographic area. Data provided by the survey also show that the industry serves children whose family incomes qualify them for subsidized meals and early education services. Programs also serve dual language learners. The industry cares for and educates children of all races in the state and those of Spanish, Hispanic, or Latino ethnicity, among others. The percentage of Non-Hispanic White children in formal care is slightly lower than their proportion in the population in general, and the percentage of Non-Hispanic Black children in care is higher than their proportion in the state’s population. This disparity may reflect differences in the utilization of child care by race or may reflect a difference in the rates of survey response by race.

According to the survey, the labor force in the early care and education industry is largely composed of lead and assistant teachers and other teaching staff. Employee turnover is an issue facing this industry, with 80% of responding centers having lost at least one employee in the previous 12 months. In centers, the median wage for lead Georgia’s Pre-K or Head Start teachers is \$16 per hour, and for other lead teachers, the median hourly wage is \$9 per hour. In family child care homes, the median hourly wage for paid assistants is \$8. In schools, the median hourly wage for lead Georgia’s Pre-K teachers is \$27.64 and for Georgia’s Pre-K assistant teachers, \$11.04. Some of the wage disparities can be explained by the analogous differences in levels of education achieved. Staff in schools tend

to have higher levels of education than do their counterparts in child care learning centers and family child care homes. A large proportion of centers and nearly all schools offer at least some benefits to full-time staff.

The survey data indicate that child care learning center staff and family child care home owners tend to be more racially and ethnically diverse than staff in public schools. The industry in Georgia employs a much larger proportion of women than men.

Median annual revenue per child is more than \$4,700 among child care learning centers, \$3,900 among family child care homes, and \$3,512 among schools. Centers offering Head Start or Early Head Start programs or Georgia's Pre-K tend to have higher revenues per child than centers not offering either program. The largest source of revenue for centers and family child care homes is parent fees. Important secondary sources of income for these groups are publicly funded programs, including Georgia's Pre-K (for centers), federal nutrition programs, and the federal CAPS child care subsidy. Georgia Lottery for Education/Georgia's Pre-K funding is by far the largest source of revenue for school-based Georgia's Pre-K programs.

Approximately 26% of center directors have associations with local businesses to obtain referrals, subsidies, or incentives for employees who enroll their children; 74% do not have such connections. Nearly 31% of child care learning centers and 11% of family child care homes care for "some" (1% to 49%) children whose tuition or fees are paid by a family member's employer. For another 4% of center-based and 8% of family-based providers, "most" or "all" of their children have at least some of their fees paid by an employer.

As these findings show, Georgia's early care and education industry serves important needs, subject to often very tight budget constraints. The next chapter puts these findings in context by exploring recent demographic and population trends in the state.



Chapter Four Demographic and Economic Profile of Georgia Post Great Recession

Understanding prevailing economic conditions in the United States and particularly in Georgia provides important context to the role that the early care and education industry plays in the state's economy. Demographic and labor force trends also help put the industry profile presented in the previous chapter in perspective. The recent global financial crisis, widely known as the Great Recession, resulted in shrinking economic output and generational highs in unemployment in Georgia, and the early care and education industry was not left unaffected. The industry supports Georgia's labor force, allowing hundreds of thousands of parents in the state to work. Consequently, when unemployment increases and parents are out of work, the child care industry must adjust accordingly. The \$4.7 billion of annual economic impact attributable to this industry occurs *despite* the general economic malaise and slow recovery in Georgia described in this chapter.

Using a variety of national and state data sources, this chapter details demographic and economic trends in Georgia over the past 10 years and the changing characteristics of Georgia's labor force. The final portion of this chapter uses data from the Early Care and Education Economic Impact Survey to offer insight into how the Great Recession affected Georgia's early care and education industry and how it highlights signs of recovery.

Several economic, demographic, and labor force changes in Georgia relate to demand for early child care and education:

- The Great Recession forced many individuals out of the workforce, but as Georgia's economy slowly recovers, demand for early care and education will likely grow as more parents find work and need early education programs for their children.
- The recession affected different industries to varying degrees, and in its aftermath, the shares of parents working in different industries and occupations have changed, likely altering the demand for early care and education in ways that are not completely predictable.
- The past five years have seen a decline in the number of children ages birth to four years, but this age group is predicted to grow after 2015, increasing the number of children the industry may be called on to serve in the coming years.

This chapter first examines the economic conditions and population trends in the United States and Georgia. Particular attention is paid to the labor force by gender and race. Next, trends in family and labor force characteristics like the rise of single-parent households and the increase in the number of women in the labor force are analyzed. Employment trends are detailed within industries in Georgia, highlighting trends that might affect the demand for early care and education in the future. Finally, survey data are used to examine how early care and education programs said they were faring in the wake of the Great Recession as the economy shows signs of recovery.

ECONOMIC CONDITIONS IN GEORGIA, THE SOUTH, AND THE UNITED STATES

Even though in 2014 the Georgia economy grew by 4.4% (the largest year-to-year increase since 2009), the state has yet to fully recover from the effects of the Great Recession, which lasted from December 2007 to June 2009 (US Department of Commerce, Bureau of Economic Analysis 2014). Table 4.1 shows that Georgia ranked in the bottom third in terms of average gross domestic product (GDP) growth rates among the 50 states and the District of Columbia from 2009 to 2014.

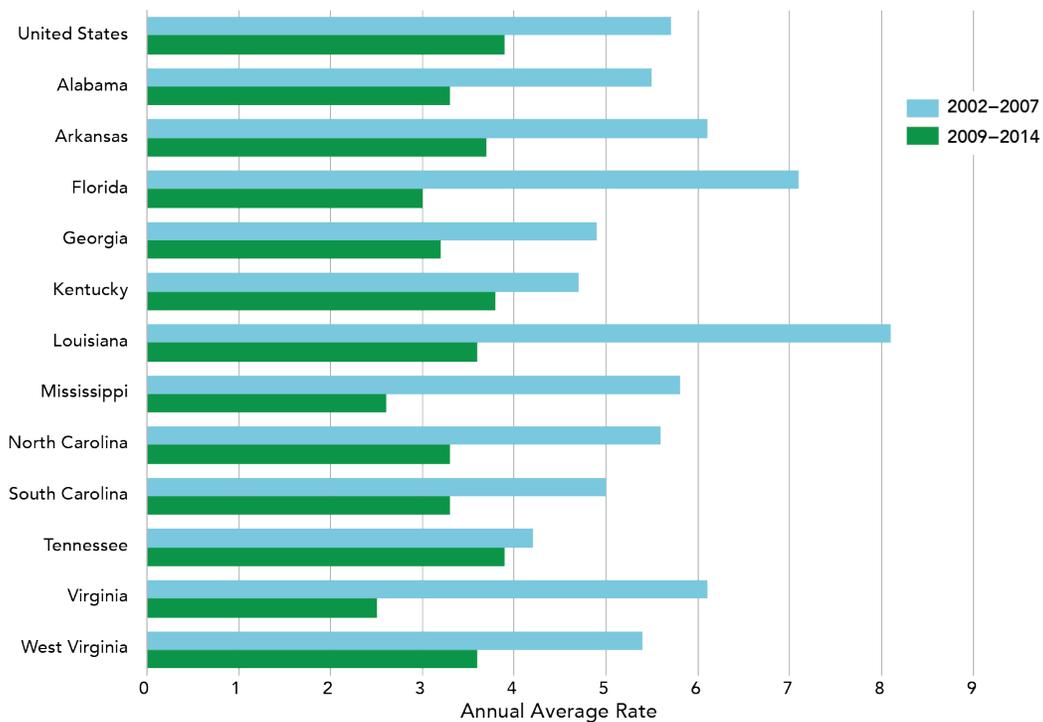
Table 4.1. GDP Annual Average Rate of Growth Ranking 2009–2014 in Georgia, the United States, and Other Southern States

	Average Annual GDP Rate of Growth	National State Ranking
United States	3.9	-
Tennessee	3.9	15
Arkansas	3.7	21
Louisiana	3.6	22
Alabama	3.3	29
North Carolina	3.3	30
South Carolina	3.3	31
Georgia	3.2	33
Florida	3	38
Mississippi	2.6	44

Source: US Department of Commerce, Bureau of Economic Analysis

Georgia has experienced an average growth of 3.2% since the beginning of the recession, roughly 20% lower than that of the United States as a whole and approximately 50% lower than Georgia’s average annual growth rate before the recession. Figure 4.1 compares the growth rates of the United States and southern states before and after the recession.

Figure 4.1. Annual Average Rates of Growth, United States and Southern States



Source: US Department of Commerce, Bureau of Economic Analysis

Compared to other states in the union, Georgia's recovery lags. Among southern states, only Florida, Mississippi, and Virginia have seen slower post-recession rates of growth. Despite Georgia's slow recovery, the economy is now rebounding.

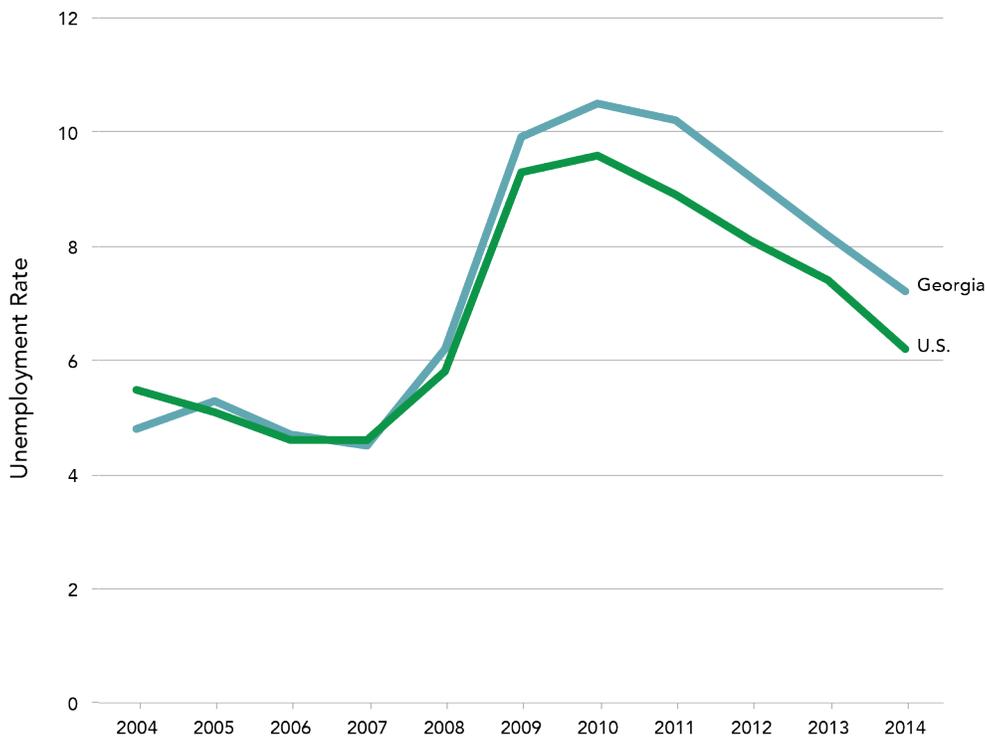
Unemployment

Georgia's slow economic performance since the end of the Great Recession is also reflected in the state's unemployment figures. Georgia's unemployment rate in 2014 ranked 42nd out of the 50 states and the District of Columbia. Figure 4.2 shows the unemployment rate for the United States and Georgia since 2004. Since 2007, Georgia's rate has exceeded that for the United States as a whole (currently one percentage point higher than the national average).

Since peaking at 10.5% in 2010, the Georgia unemployment rate has slowly improved, reaching 7.2% in 2014. Nevertheless, this current annual rate of unemployment is still 2.7 percentage points greater than pre-recession levels.

While clearly related, improving unemployment rather than GDP growth may more directly affect the demand for early care and education as working parents are more able to afford and require these services. The persistent high rates of unemployment in Georgia, even compared to the rest of the country, are likely to keep some families from enrolling their children in early care and education programs.

Figure 4.2. Unemployment Rates for the United States and Georgia

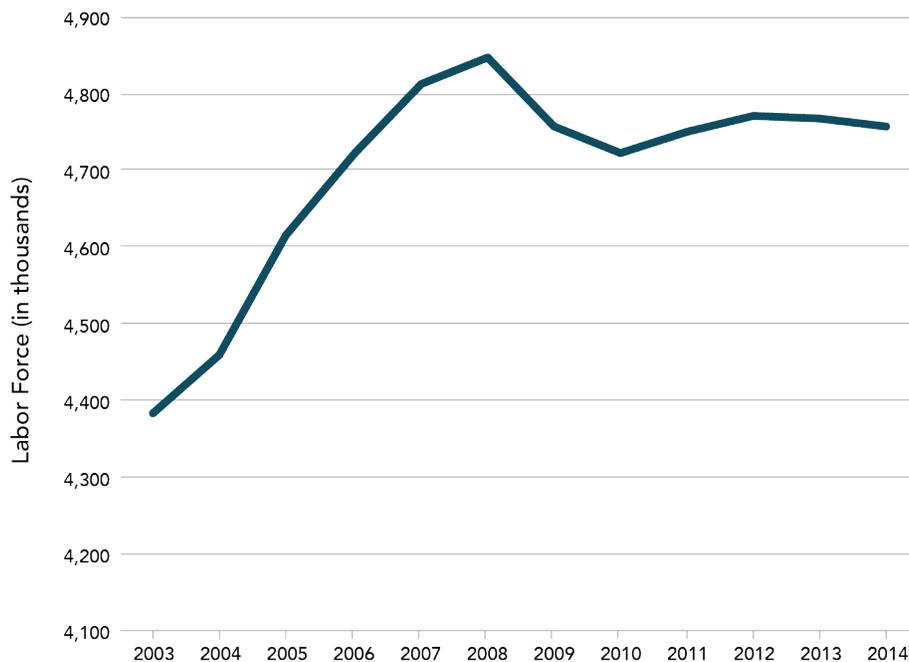


Source: US Bureau of Labor Statistics: Local Area Unemployment Statistics Table, Unemployment Rates for States

DEVELOPMENTS IN GEORGIA'S WORKFORCE

Clearly, Georgia's labor force is experiencing the lingering effects of the Great Recession. Figure 4.3 shows the number of people annually engaged in the state's workforce from 2003 to 2014. In 2014, Georgia's labor force totaled 4,756,708 people, which is 88,000 below the all-time peak of 4,845,054 achieved in 2008. Females currently account for 47.8% of the labor force in Georgia, up from 46.9% in 2008. Although the change over this five-year period appears small, it represents a continuing trend whereby women are accounting for an ever-increasing share of the labor pool. In fact, in 2013 there were roughly 80,000 fewer men and approximately 9,000 more women in Georgia's labor force than in 2008 (US Census Bureau/American FactFinder 2013a).

Figure 4.3. Georgia's Labor Force, 2003–2014



Source: Georgia Department of Labor, Workforce Information & Analysis, Local Area Unemployment Statistics Unit

Labor force participation rates (LFPR) have been especially hard hit, falling precipitously since 2008 as more workers became discouraged and stopped seeking employment altogether.¹⁹ Georgia's LFPR in 2013 was 62.3%, 4.5 percentage points below the 2008 level. After exceeding the average US LFPR for years, Georgia now trails the United States by nearly a full percentage point.

The workforce in Georgia is increasingly composed of single individuals versus married couples. According to the US Census Bureau, in 2013 roughly half of Georgia's workforce was married and half was single, while in 2008, 53% of Georgia's workforce was married and 47% was single (US Census Bureau/American FactFinder 2013a). This tendency in the workforce toward increasing percentages of single individuals is consistent for both men and women in Georgia. Among men in the Georgia labor force, 53.9% are married, while 46.3% of female labor force

¹⁹ The labor force includes those working and those seeking employment. Those who become discouraged and stop seeking work are not included in the LFPR or the unemployment rate.

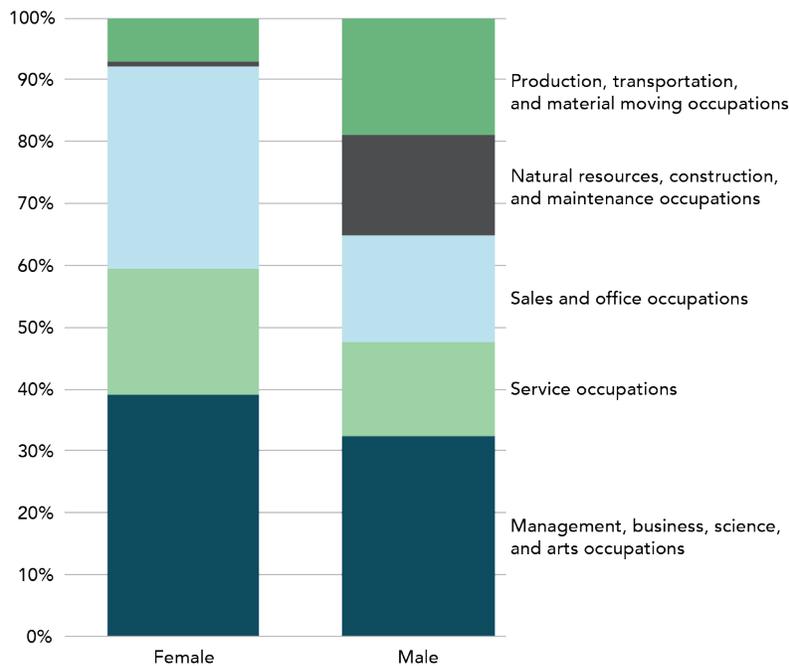
participants are married. Both of these figures are down from 2008 levels, when 56.5% of men and 48.6% of women in the workforce were married.

When the single category of workers is further broken down by status—never been married, separated, widowed, or divorced—both similarities and differences among women and men emerge. For example, about a third of both male and female labor force participants in Georgia are single, never married. However, single workers who are separated, widowed, or divorced account for a much larger share of the female than the male workforce in Georgia, 21% versus 13%, respectively. This trend toward single labor force participants could translate into increased demand for early care and education if these households have young children.

OCCUPATIONAL TRENDS IN GEORGIA AND IN THE UNITED STATES

The Great Recession affected males more than females. The share of jobs held by males in 2013 was 4.2% below 2007 levels. The corresponding figure for females was 1.2% above 2007 levels. Figure 4.4 details Georgia’s occupation shares by gender in 2013.

Figure 4.4. Occupational Shares by Gender for the State of Georgia



Source: US Census Bureau, American FactFinder

Much of this differential can be explained by job structure, which differs considerably for men and women in Georgia. For instance, while nearly 48% of jobs held by males are in the fast-recovering “Management and Business” and “Service” occupational categories (32.4% and 15.2%, respectively), roughly 60% of jobs held by females are in these areas (39% and 20.5%, respectively). For both males and females in Georgia, about a third of their total jobs are in two poorly performing sectors: “Natural Resources and Construction” and “Sales and Office” occupations. However, for males the distribution of jobs is more skewed to the low-performing “Natural Resources

and Construction” occupational category.²⁰ This category accounts for 16.3% of jobs held by males versus just 1% of jobs held by females.

TRENDS IN MEDIAN EARNING BY OCCUPATION, 2005–2013

According to the US Census Bureau, in 2013 overall median earnings in Georgia amounted to \$31,239, up a modest 3.1% compared to 2005 (see Table 4.2). In contrast, for the United States as a whole, median earnings were up 6.9% over this same time period. In Georgia, gains in median earnings ranged from a low of 0.6% in “Natural Resources and Construction” to a high of 10.0% in “Management and Business.” Interestingly, in 2005 Georgia’s median earnings slightly exceeded those of the United States as a whole (US Census Bureau/American FactFinder 2013c). In fact, in three of the five major occupational groupings, Georgia’s median earnings were greater than nationwide figures. By 2013, however, not only did Georgia lag the United States in overall median earnings (\$31,239 vs. \$32,387), each of its major occupational groupings also trailed nationwide totals. Moreover, the rate of growth in 2005–2013 median earnings for each of Georgia’s major occupational groupings significantly lagged those for the United States.

The stagnant growth in median earnings comes at a time of rising child care prices. According to the 2013 Georgia Market Rate Survey, the 75th percentile price of infant care in a child care center was \$135 per week in 2005, while the corresponding price in 2013 was \$172.75. This represents an average annual growth rate in price of 3.13%, with similar growth in the price for other age groups and types of care. For low-income individuals, the price of care could be getting less affordable over time as prices grow faster than their wages.

Reflective of national trends, gender differences in median earnings in Georgia are quite substantial. Table 4.2 shows the median earnings in the United States and Georgia by occupational groupings in 2005 and 2013.

²⁰ These industries were some of the poorest performing through 2013 but have more recently shown signs of recovery (Georgia Department of Labor Division of Workforce Statistics & Economic Research).

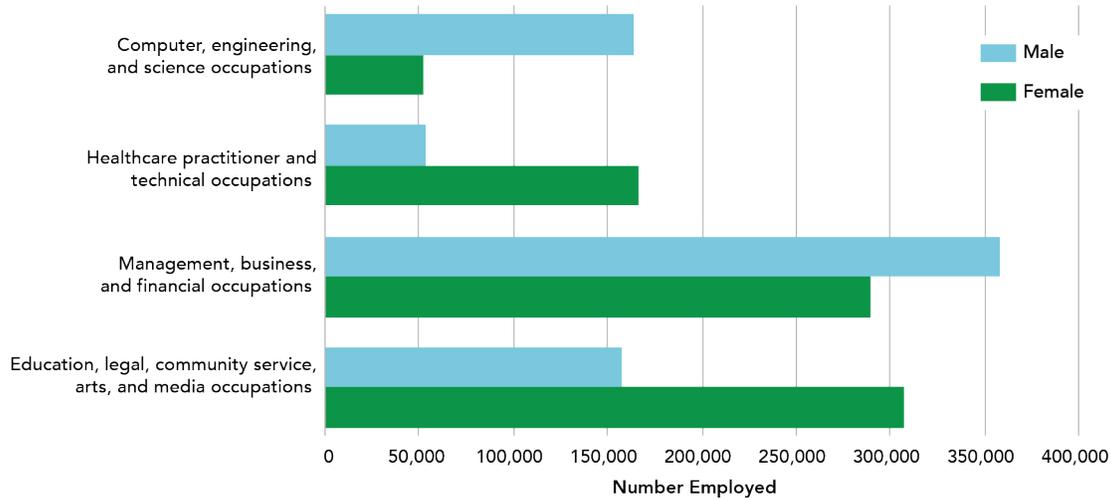
Table 4.2. Median Earnings in the United States and Georgia by Occupational Groupings, 2005 and 2013

	Georgia			United States		
	2005 Median Earnings	2013 Median Earnings	% Change	2005 Median Earnings	2013 Median Earnings	% Change
Civilian employed population 16 years and over	\$30,306	\$31,239	3.1	\$30,289	\$32,387	6.9
Management, business, science, and arts occupations	\$46,435	\$51,058	10.0	\$46,246	\$52,478	13.5
Service occupations	\$16,656	\$17,072	2.5	\$15,911	\$17,425	9.5
Sales and office occupations	\$26,908	\$27,073	0.6	\$25,771	\$27,412	6.4
Natural resources, construction, and maintenance occupations	\$27,679	\$29,658	7.1	\$30,322	\$33,084	9.1
Production, transportation, and material moving occupations	\$25,418	\$26,779	5.4	\$26,658	\$29,425	10.4

Source: US Census Bureau / American FactFinder

A portion of the gender earnings differentials can clearly be explained by the concentration of women in the lower paying segments of the major occupational categories. For example, the major occupational group “Management and Business” comprises four broad subgroupings: education, legal, community service, art, and media occupations; management, business, and financial occupations; healthcare practitioner and technical occupations; and computer, engineering, and science occupations. Figure 4.5 shows that nearly 40% of women in Management and Business occupations work in the lowest paying subgroup: education, legal, community service, art, and media occupations. The median earnings for women in this subgroup in 2013 were \$36,000, and women accounted for two-thirds of the jobs in this category. In contrast, only 6% of women in Management and Business occupations were engaged in the highest paying subgroup—computer, engineering, and science occupations—with median earnings for women in 2013 of almost \$54,000. Women accounted for less than a quarter of these jobs, while the vast majority were held by men.

Figure 4.5. Employment by Gender in Subgroupings for the “Management and Business” Occupational Group in Georgia



Source: US Census Bureau, American FactFinder

POPULATION TRENDS IN GEORGIA AND THE UNITED STATES

General Population

The US Census Bureau estimates that in 2014 Georgia’s population surpassed 10 million for the first time in its history (US Census Bureau/American FactFinder 2014b). The state’s population has grown by 1.9 million people, or roughly by 23%, since the start of the century, and it is now the eighth largest state in the nation. Nevertheless, the rate of growth in the state’s population since the end of the recession in 2009 has slowed considerably. Between 2000 and 2009, Georgia’s population grew by a little more than 2% a year on average (US Census Bureau 2014). In the years since, population growth in Georgia has averaged roughly 0.5% a year. According to the Governor’s Office of Planning and Budget (2012), Georgia’s population is projected to grow to 11.3 million residents by 2020.

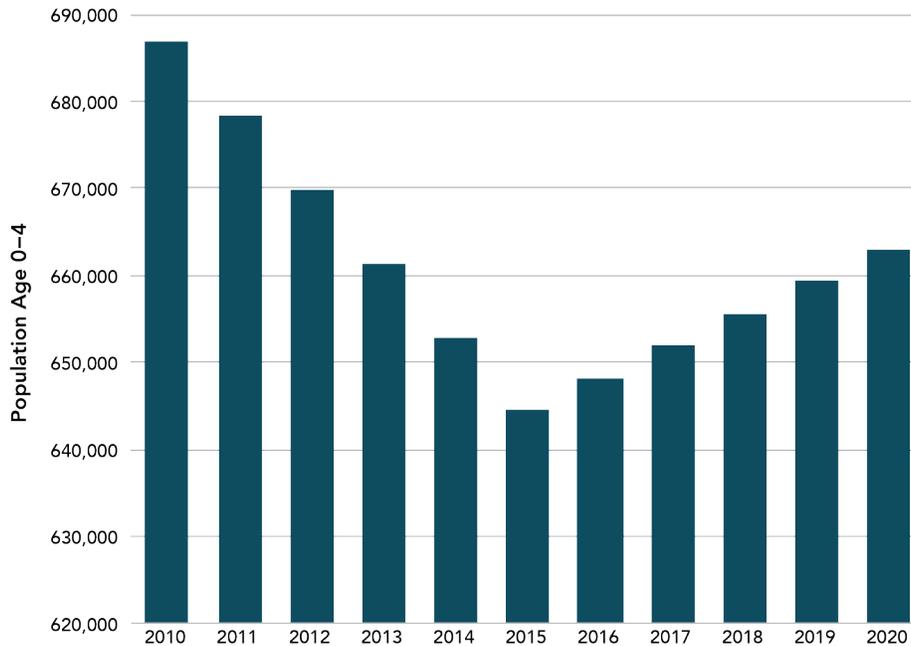
The population in Georgia is heavily skewed toward a few counties. In fact, Fulton, Gwinnett, Cobb, and DeKalb counties alone account for roughly a third of the state’s population. These counties, together with the counties of Chatham, Clayton, Cherokee, Henry, Muscogee, Richmond, Forsyth, and Hall, contain half the state’s population. In other words, these 12 counties by themselves have as much population as the remaining 147 counties in the state. Moreover, their share of the state’s population will likely grow since their growth rates will probably continue to exceed the state’s average.²¹

Population of Children Under Five Years Old

The Governor’s Office of Planning and Budget (2012) predicts that the population of children under five years old in the state will reach its lowest point in 2015 at roughly 644,000 children before showing growth once again. This figure represents a drop of more than 42,000 young children since 2010. Figure 4.6 shows that after 2015, this population is projected to continuously grow, reaching a total of 663,000 young children in 2020. A growing number of children under five years old is a primary driver for increased demand for early care and education. If current forecasts are realized, there will be more families and children seeking these services in the coming years.

²¹ According to the US Census Bureau, between 2010 and 2013, Forsyth, Fulton, and Muscogee counties ranked among the 100 fastest growing counties in the nation with a population of 10,000 or more.

Figure 4.6. Georgia’s Birth-to-Four Population 2010–2015, with Projections through 2020



Source: Governor’s Office of Planning and Budget, State of Georgia

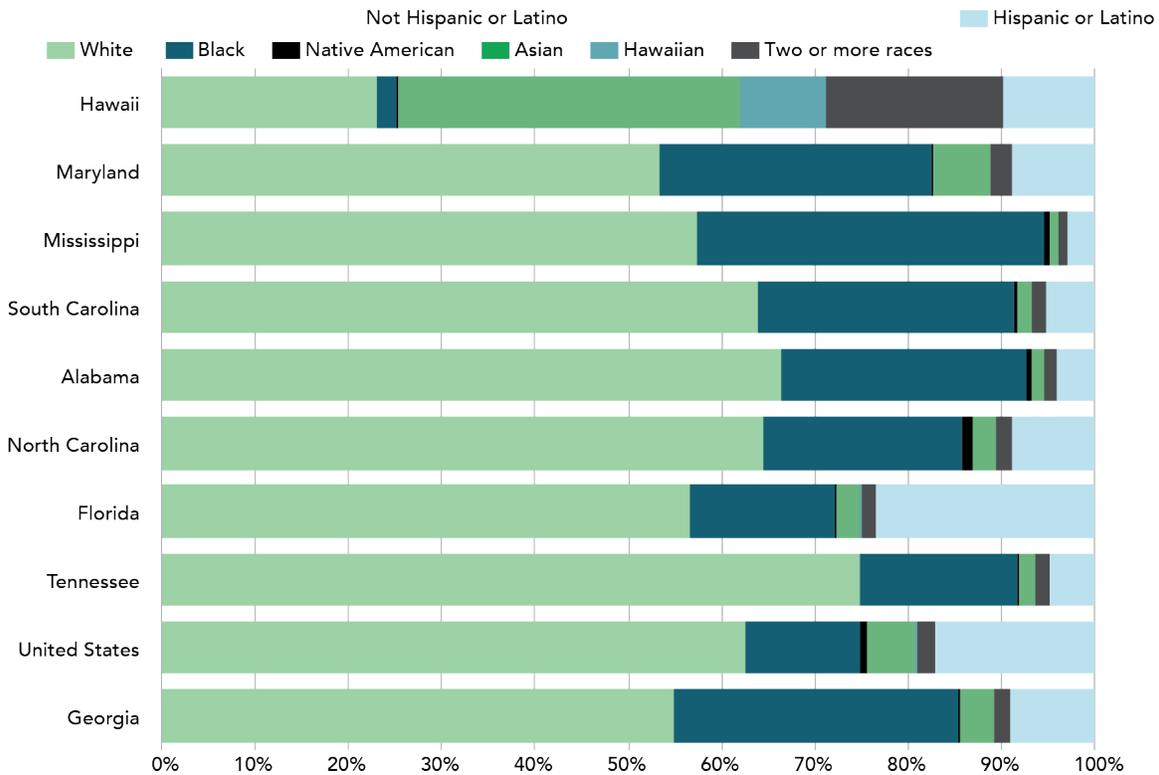
Race

Georgia has one of the most racially diverse populations of all non-Mexico-bordering states in the country. Only Hawaii and Maryland have more diverse populations among such states.²² Figure 4.7 shows the population diversity in the United States and some select states. In 2013, Georgia had roughly 5.5 million Non-Hispanic Whites, 3.1 million Non-Hispanic Blacks, and 916,000 ethnic Hispanics or Latinos (US Census Bureau, Population Division 2015). The racial composition of the state has changed significantly since the turn of the century, with the percentage of Non-Hispanic Whites in the population falling from 63.3% in 2000 to 54.8% in 2013. During that same period, the percentage of Non-Hispanic Blacks increased from 27.9% to 31.0%, and the percentage of Hispanics grew from 5.3% to 9.2%. In absolute terms, the Non-Hispanic Black population actually grew by more than the Non-Hispanic White population during this 13-year period—763,000 for Non-Hispanic Blacks versus 291,000 for Whites. The ethnically Hispanic or Latino population grew by 481,000 people, more than doubling in number over this period.

It is unclear what role the changing racial diversity in Georgia will have on the marketplace for early care and education. The growth in the Hispanic population will likely serve to increase the number of children in Georgia who require dual language learner support or early care and education in settings with Spanish-speaking teachers. If the fastest growing groups have particular preferences in regard to the amount and type of child care, it could spur changes in the marketplace for early child care and education.

²² Diversity is measured here in terms of the share of minority populations in a state and ethnic variety.

Figure 4.7. Population Diversity in the United States and Selected States



Source: US Census Bureau, American FactFinder

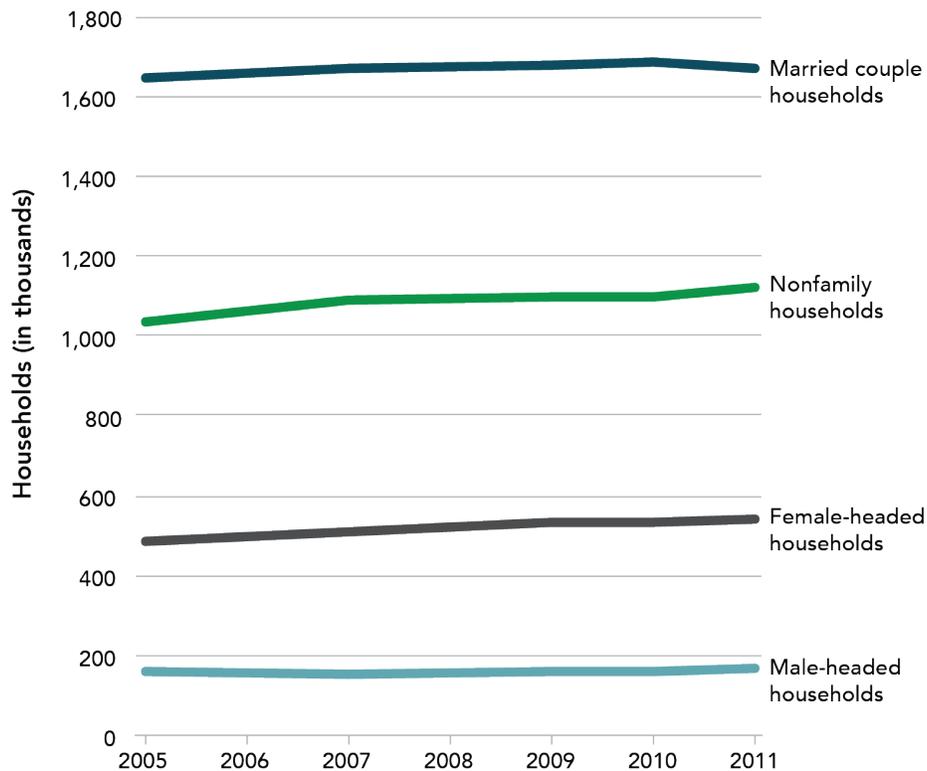
Households

General Overview

There were 3.5 million households in Georgia in 2013, up from 3.3 million in 2005 (US Census Bureau/American FactFinder 2013b). Married couples accounted for 47.2% of all households, male-headed households for 5.0%, female-headed households for 15.3%, and nonfamily households for 32.6% of all households in Georgia.²³ Despite a 6.8% increase in the number of overall households in Georgia between 2005 and 2013, growth in married-couple households inched up by just 1.8% over this same period. In contrast, the number of male-headed households, female-headed households, and nonfamily households grew by roughly 12% each. In absolute terms, the number of married-couple households increased by almost 29,000 during the 2005–2013 period. During that same time, there were increases of 19,000, 57,000, and 122,000, respectively, for male-headed households, female-headed households, and nonfamily households. Figure 4.8 shows the total numbers for each type of household since 2005.

²³ A “nonfamily household” consists of a householder living alone (a one-person household) or a situation in which the householder shares the home exclusively with people to whom he/she is not related.

Figure 4.8. Household Types in Georgia 2005 to 2011



Source: US Census Bureau, American FactFinder

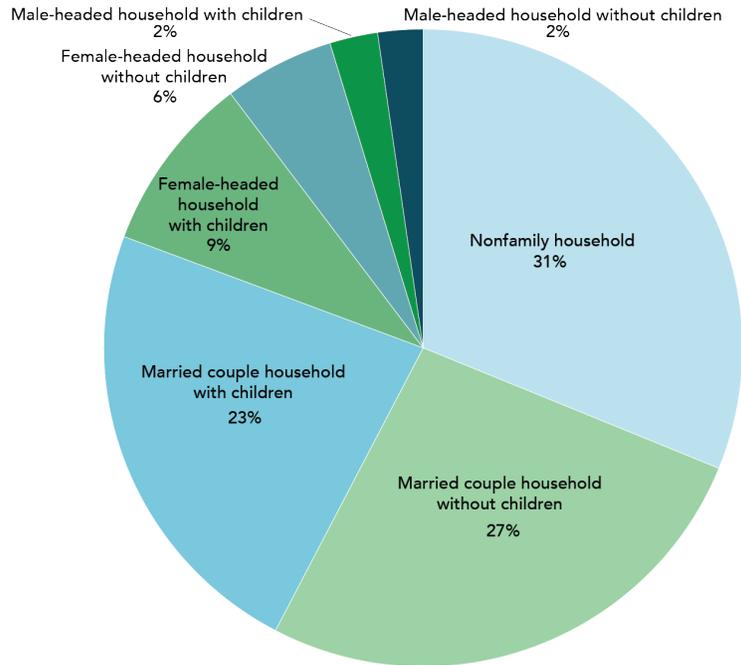
Household Types and Children

Of the 3.5 million households in Georgia in 2013, less than a third—1.1 million—have children under the age of 18, and approximately 40% of these have children under the age of six. In total, nearly 442,000 households in Georgia contain children under the age of six. Married-couple households account for 288,000 of these, while female-headed and male-headed households account for 116,000 and 38,000, respectively.

These figures represent a downward trend. In 2005, for example, Georgia had 3.3 million households, of which 1.1 million included children under the age of 18. Nearly 45% of these households had children under the age of six. Figures 4.9 and 4.10 explore the difference in shares of household types in Georgia in 2005 and 2013. In total, 508,000 households in Georgia in 2005 contained children under the age of six. Married couples accounted for 357,000 of these, while female-headed and male-headed households accounted for 120,000 and 31,000, respectively. Indeed, the share of households with children under age 18 in Georgia fell from 34% of total households to 30% between 2005 and 2013.

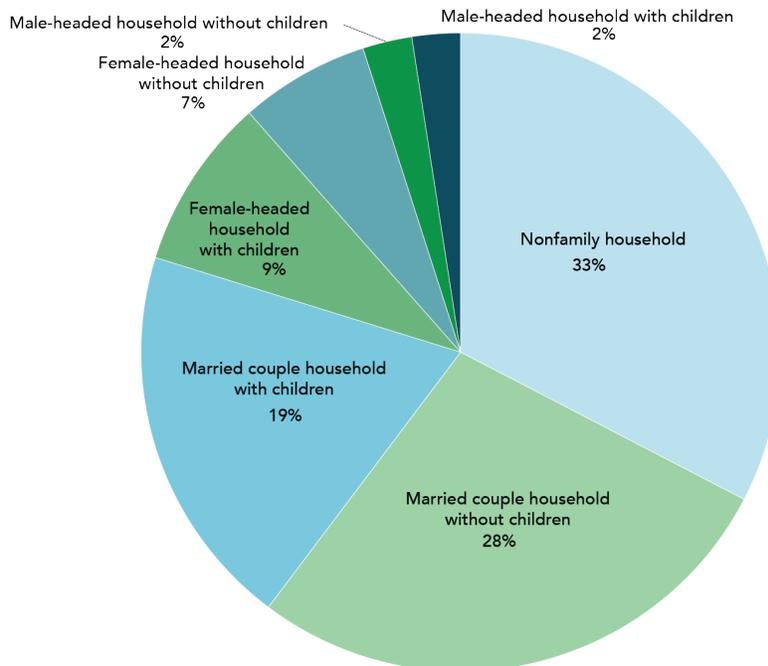
A single-parent household with young children is likely to have only one potential wage earner who is also responsible for his/her young children. This person may not be able to perform both roles at the same time. This issue is not as acute for families with two parents or adults present. If this trend continues and the children in Georgia under six years old become more and more likely to live in households with single parents, the need for child care, particularly subsidized child care, could increase.

Figure 4.9. Household Types and Children in Georgia 2005



Source: US Census Bureau / American FactFinder

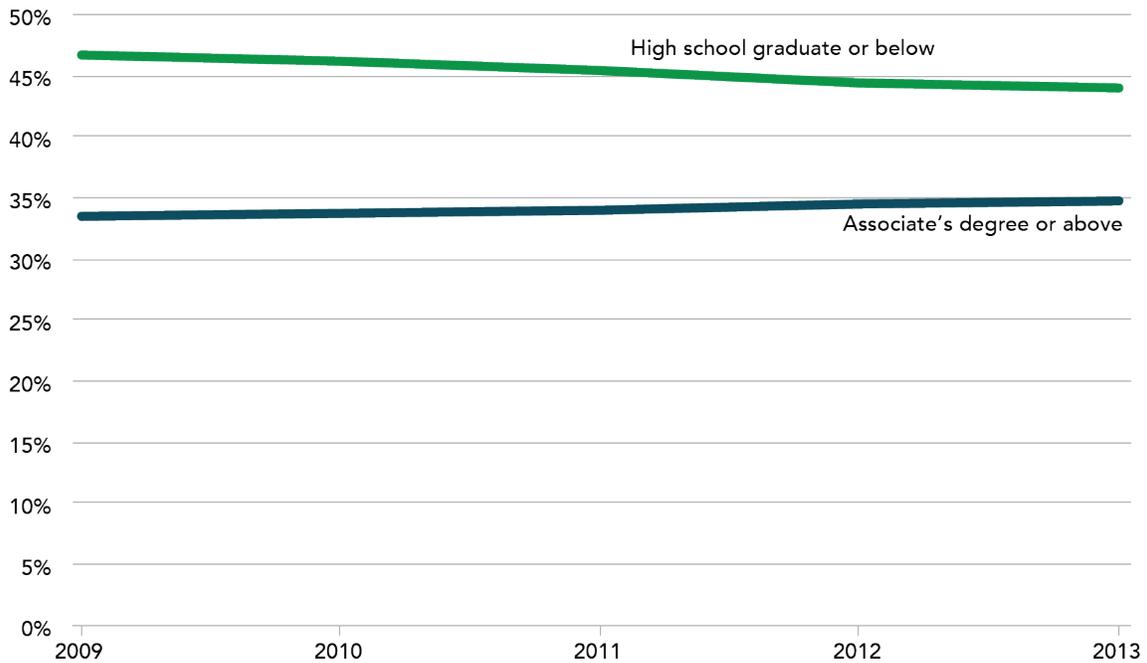
Figure 4.10. Household Types and Children in Georgia 2013



Source: US Census Bureau / American FactFinder

Parents of children under six years old holding higher degrees and earning higher incomes are more likely to seek early care and education because they have a greater chance of being employed than those with less education.²⁴ Between 2009 and 2013, the likelihood of adults in Georgia holding college degrees rose, a trend likely to be reflected in Georgia’s parent population (see Figure 4.11). The share of associate’s degree holders or higher in Georgia increased during this period, and the share of the population with only a high school degree or less decreased. In 2013, almost two-thirds of parents in Georgia with children under five held an associate’s degree or higher, a much higher percentage than in the general over-25 population. Parents who hold higher degrees are likely to have higher relative demand for quality early care and education due to working constraints and a general preference for education.

Figure 4.11. Percentage of Degree Holders and High School Graduates in Georgia, 2009–2013



Source: American Community Survey Five-Year Samples for 2009–2013

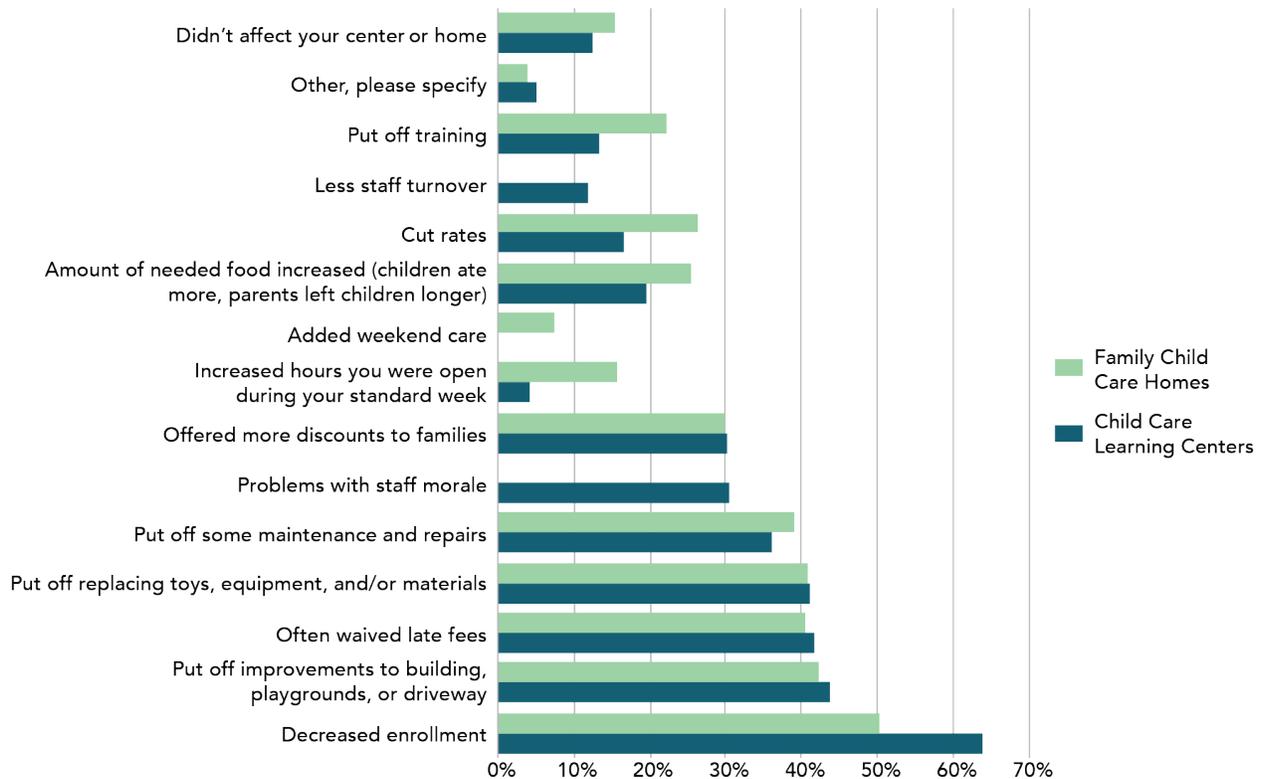
IMPACT OF THE ECONOMIC RECESSION ON GEORGIA'S CHILD CARE PROGRAMS

The demographic trends over the last decade point to an economy in Georgia that has been struggling but is beginning to recover. As an industry that supports the labor market in the state by enabling parents to work, the early care and education industry is inevitably affected by workforce changes, particularly shifts in the unemployment rate. Data from the Early Care and Education Economic Impact Survey provide insight into how the industry has fared in the wake of the Great Recession.

²⁴ The Bureau of Labor Statistics reports that the unemployment rate in 2014 was 9% among those with less than a high school diploma, 4.5% among those with an associate’s degree, and even smaller percentages among those with more advanced degrees; http://www.bls.gov/emp/ep_chart_001.htm.

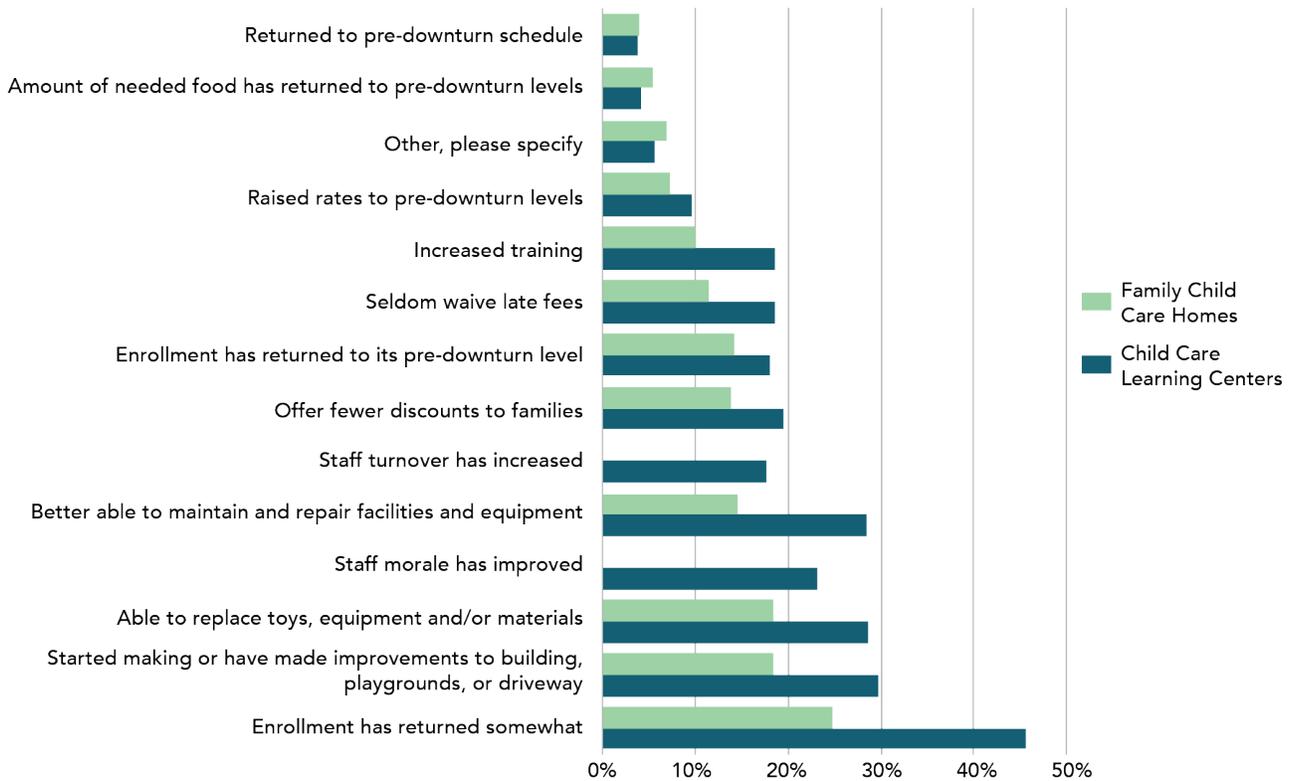
Figure 4.12 shows that Georgia’s child care learning centers and family child care homes experienced the recession in a variety of ways. Not surprisingly, both types of programs indicated that enrollment decreased due to the recession (63.8% of centers and 50.3% of homes). With less income from fewer children enrolled, programs postponed maintenance and repairs or improvements to the facilities and the replacement of toys, equipment, and materials. Some programs reported offering discounts and waiving late fees to help families and maintain enrollment.

Figure 4.12. How, if at all, did the recent economic downturn affect your center or home?



Center-based and family child care home-based programs reported various signs of fiscal recovery since the recession; however, these were more prevalent for center- than family-based programs. Figure 4.13 indicates that for many programs, enrollment is beginning to recover: enrollment has returned to its pre-downturn rate for some programs and returned “somewhat” for others. In addition to starting to make improvements to facilities; replacing toys, equipment, and materials; and being better able to maintain or repair facilities, some programs are not required to offer discounts or waive fees to maintain enrollment. Some center programs have seen staff morale improve, and both center-based and family child care home programs are increasing staff training.

Figure 4.13. In which ways has your center or home recovered from the recent economic downturn?



Biggest Challenges or Obstacles to Early Care and Education Businesses

Early care and education programs in Georgia face a variety of obstacles, ranging from staffing issues to low enrollment numbers to affording employee benefits. The top challenges or obstacles facing their businesses are similar in many respects and also differ due to the nature of each of their businesses. Figure 4.14 shows that over half (55.8%) of center-based directors have trouble finding qualified staff. They face other staff-related challenges as well. Among family child care homes, the most commonly cited challenges are earning enough income (44.5%) and affording vacation, sick leave, or personal time (37.7%).

Family child care home operators only were asked an additional question about their biggest personal challenges to staying in business (Figure 4.15). The need for retirement savings and the ability to afford health insurance are the two largest business challenges these providers face.

Figure 4.14. What are the three biggest challenges or obstacles to your business?

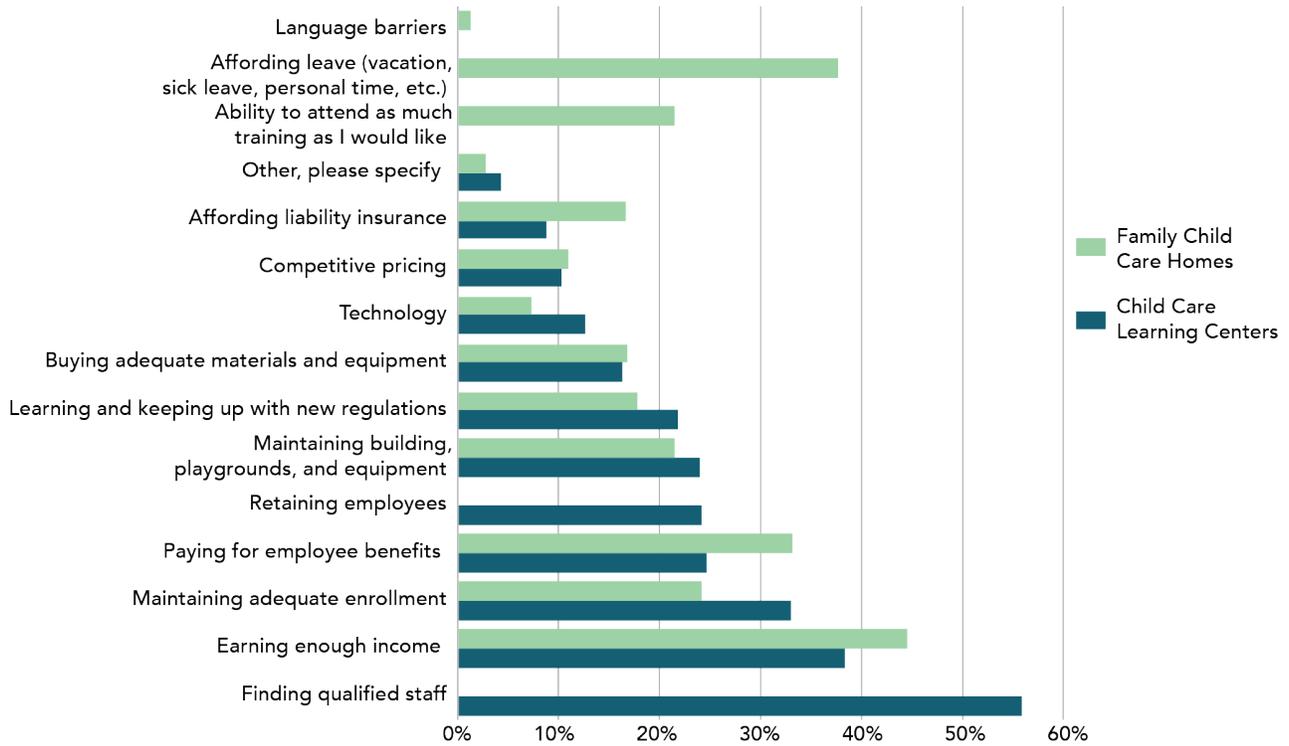
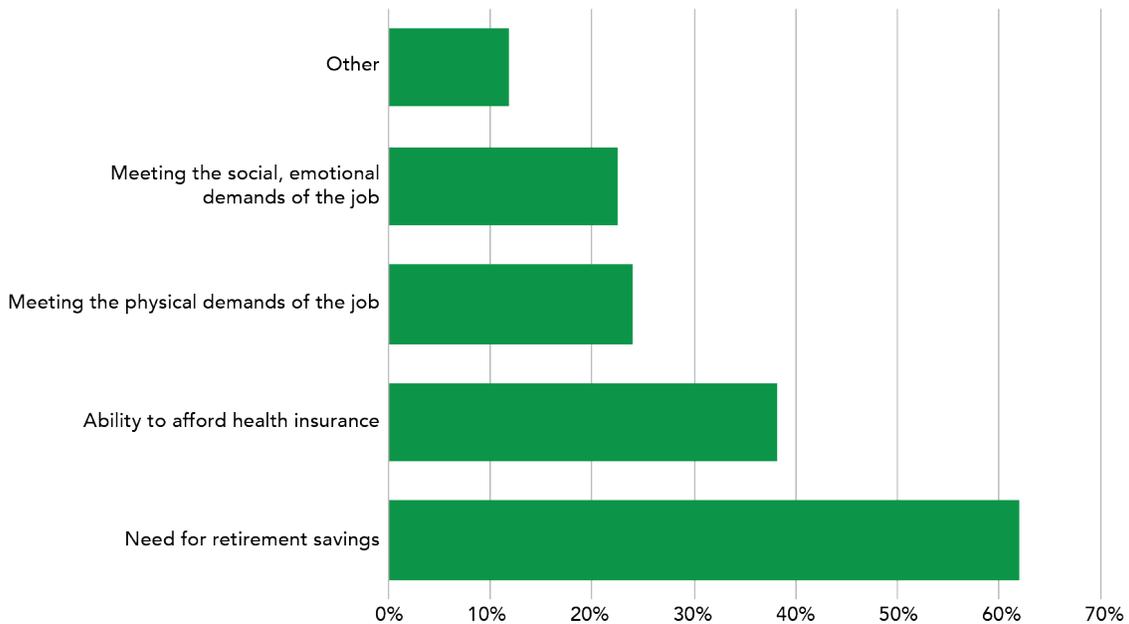


Figure 4.15. What are your biggest personal challenges in staying in the business (family child care homes only)?



LOOKING TO THE FUTURE

The recent Great Recession, the subsequent slow economic recovery, and declining populations of young children notwithstanding, the need for affordable early education services will persist. All signs point to impending increases in the demand for early care and education, particularly affordable high quality care, as the economy continues its recovery. This follows a period when, due to the level of unemployment, the demand for early care and education may have declined. Evidence suggests that this may have resulted in closures of some centers and family child care homes.²⁵ Even so, the industry itself is part of the recovery story, accounting for more than 67,000 jobs and \$4.7 billion in annual economic activity. The ability of the industry to adjust to a stronger economy and potential increase in demand for early care and education is critical to reaping the benefits of quality care.

Georgia's child care programs' descriptions of the impact of the recession and their recovery from it imply that they showed ingenuity, disciplined management, and a strong drive to continue serving families. These skills will also be needed in facing future challenges. Centers and family child care homes struggle to provide benefits for employees, and operators of homes seem particularly vulnerable because their businesses depend so intensively on the well-being of one person, the operator. Centers have more diversified teams on whom to rely for stability over time. As the owners of family child care homes age, the needs for health insurance and retirement savings that they expressed on the survey are likely to become more acute. Without these basic supports, their businesses and years of experience in early care and education may be lost to the state and its children.

²⁵ 10,373 licensed establishments were surveyed for the 2007 Georgia Economic Impact Study of the Early Child Care and Education Industry, and 6,333 licensed establishments were surveyed for this study.



Chapter Five Long-Term Economic Impact of Quality Early Care and Education and Initial Response to Georgia's Quality Rated Program

The early care and education industry's impact in Georgia extends beyond the short-term economic impact presented in Chapter 2. A vast literature on child development, education, health, and labor markets demonstrates that early childhood education programs have a number of positive long-term impacts on children and parents.

These benefits accrue to society through increases in short-term and long-term worker productivity and reductions in spending on social services. The quality of early care and education is another vital factor that amplifies both the short- and long-term impacts of the industry. Georgia has joined many other states in focusing on increasing quality within the early care and education industry. The 2012 launch of Quality Rated, the state's quality rating and improvement system, has brought increased attention to the long-term benefits of quality early care and education programs.

This chapter is divided into three primary sections. The first section examines prior research documenting the long-term effects of quality early care and education programs on both the children and parents they serve. This literature shows that cost effectiveness is an important component in early care and education systems. Evidence indicates that the cost of care affects the utilization of care, particularly among low-income families, which research shows are often those that benefit the most from quality early care and education programs. Thus, the second section in this chapter examines the costs versus the benefits of providing quality early care and education and discusses several state and federal programs that help families afford such care. The section explores two key questions asked throughout this literature: What is "quality" early care and education, and how much does it cost?

The final section in this chapter looks at the initial response to Quality Rated. Survey responses from early adopters of Quality Rated offer insights into their opinions about the costs, benefits, and effectiveness of the program.

Among the compelling findings, the following seem particularly relevant as more and more providers are participating in Quality Rated.

- Research consistently finds that quality early care and education yields long-term benefits that offset much of the investment in care.
- Studies that have estimated the cost of quality child care initiatives find that the long-term benefits of quality in early care and education far outweighed the short-run costs.
- Quality early care and education reduces parental absenteeism from work and increases parental job satisfaction and job security.
- Research finds that quality early care and education leads to increased educational attainment of children, long-term job prospects, and improved health outcomes.
- In the short run, quality programs have a direct impact on the economy because they tend to have higher staffing ratios and expenditures per child.
- Quality programs offer long-term benefits that accrue through the children they serve by increasing skills and productivity within our future workforce.
- Increasing quality is not free. Therefore, it is reasonable that without some form of subsidy, quality increases could reduce access to early care and education for some families due to the associated rise in the cost of early care and education.

- Only two years into the Quality Rated program, providers assess their clients as knowing “a little” about the quality initiative.
- Programs that had adopted Quality Rated by August 2014 reported that:
 - Quality Rated has resulted in improved teaching practices and replacement of materials and equipment, or the providers expect it will.
 - The largest costs thus far have been in materials and equipment. Other costs include higher wages and professional development expenses.
 - Their classrooms have more materials, books, and displays for children, and space and furnishings are better arranged and organized to meet children’s needs.
 - Staff of centers and operators and paid assistants in family child care homes have improved teaching practices and classroom environments as a result of participating in Quality Rated.
- Of those participating in Quality Rated, center- and family-based programs assess the Quality Rated’s benefits as approximately equal to its costs, on average.

LONG-TERM BENEFITS OF QUALITY EARLY CARE AND EDUCATION FOR CHILDREN AND FAMILIES

While much of the research on early education and child development has been conducted by psychologists, Nobel Prize-winning economist James Heckman has developed the economic argument for quality early care and learning. He summarizes the case for investing in disadvantaged children in his report “The Productivity Argument for Investing in Young Children” (Heckman and Masterov 2007) by pointing to the large scope of evidence on the impact of early education on cognitive development and educational outcomes, which in turn affect long-term labor market outcomes.

Two well-known, long-term longitudinal studies provide perhaps the best evidence of the impact of quality early care and education on long-term outcomes of children: the High/Scope Perry Preschool Program, which was established in Michigan in the 1960s, and the Abecedarian Project in North Carolina in the 1970s—arguably the most studied experiments in early childhood education. Researchers have continually gathered updated data and outcomes on the participating children over four decades, providing consistent evidence of benefits to the children (now adults) engaged in these programs.

The Abecedarian Project

The Abecedarian Project randomly enrolled infants from low socioeconomic backgrounds into either an early education intervention program or an untreated control group between 1972 and 1977. Those in the treatment group received full-day, year-round, center-based educational child care from infancy through age five. Follow-up studies were conducted at ages 12, 15, 21, 30, and 35. The analysis throughout the last 40 years points to significant benefits from the project in the areas of educational attainment and cognitive outcomes. The most recent study (Campbell et al. 2014) focused on the project’s impacts on health outcomes, finding that at age 35, the health of those enrolled in the program was significantly better than those not enrolled. The health outcomes included measures of hypertension, heart disease, and diabetes—all expensive health issues in the United States.

The High/Scope Perry Preschool Program

An earlier landmark program, the High/Scope Perry Preschool Program, was conducted in Michigan during the 1960s. This program targeted very young children, ages one to four, through high quality in-center programs for three consecutive years. Data were collected for children through age 11 and when the participants were 14, 15, 19, 27, and 40 years old. Short-term effects related to program participation included higher reading and math scores

through high school. Program researchers conducted extensive cost-benefit analyses at ages 19 (Berrueta-Clement et al. 1984), 27 (Barnett 1996; Schweinhart et al. 1993), and 40 (Belfield et al. 2006; Schweinhart et al. 2005). Findings indicated that total economic benefits of the program substantially exceeded its costs, which in 2007 dollars averaged \$18,261 per child (\$21,788 in 2015). At the age 27 follow-up, for example, the ratio of benefits to costs was \$8.74 per \$1 invested. Most of the benefits were due to increased earnings and savings from crime avoidance.

Other Programs

The Chicago Child-Parent Centers have also been the subject of study and analysis. Started in 1967, these centers focus on children ages three to nine and provide learning enrichment and parent support. Analyses of the effects of the program find that the children who participated in the program had higher reading and math scores in high school (age 15), were more likely to complete high school, and were less likely to have been enrolled in special education or to have experienced grade retention. A recent analysis estimated that the program offers an 18% annual return on investment over the life of the children as a result of increased educational attainment and long-term labor market impacts (Reynolds et al. 2011).

The results from programs such as the Abecedarian Project and the High/Scope Perry Preschool Program clearly demonstrate the long-term economic impact of quality early learning for children. While specific estimates differ, virtually all of the quality analyses of these programs demonstrate a return on investment greater than 8% per year. The shorter term benefits from the programs include increased cognitive development and improved educational outcomes in later grades. These translate further into increased life-time earnings and employment and reduced social costs including incarceration.

Long-term Impacts on Parents

The availability of child care is critical for working families. The industry supports the ability of parents to engage in the workforce and focus on their jobs. Quality early care and education has been linked to increased job satisfaction and job security as well as improved long-term employment prospects among parents.

The relationship between parental employment and early care and education is intuitively obvious. Dependable, affordable, and available early care and education helps support parents' employment decisions. Several studies attest to the impact of care on child-related work interruptions. Programs for Parents (2011) estimated that \$3 billion is lost annually to child care-related absenteeism. Shellenback (2004) reported survey results showing that 29% of parents experienced a child care "breakdown" over a three-month period, affecting absenteeism and work effort.

Evidence suggests that child care subsidies can help mitigate some of these parental child care-related challenges. For example, a 2011 study found that child care subsidies reduce child-related work disruptions (Forry 2011). In addition, Press et al. (2006) found that families who receive child care subsidies are 21% less likely to report work hour-related problems at their jobs. Snyder et al. (2006) found that mothers without access to a convenient, local child care center were about twice as likely to leave their jobs as those with access to such care. Goerge and Martinez-Beck (2009) found longer employment duration in Illinois among families who received a child care subsidy. In a Bright Horizons 2013 study of parents with children in the company's early care and education facilities, more than 90% of 3,100 parents indicated that employer-sponsored early care and education helps them balance their work and family responsibilities and positively affects their overall well-being.

SOCIETAL BENEFITS OF QUALITY EARLY CARE AND EDUCATION

The research on quality child care consistently finds educational, fiscal, and societal benefits from a quality early care system (Rodd 2012). Education has always held an important place in economic growth models (Heckman

2011), dating from Nobel Prize-winning economist Robert Solow's seminal 1957 work describing three sources of economic growth: increases in the stock of physical capital (e.g., machines and buildings used in the manufacturing of goods), increases in the size of the labor force, and a residual representing other factors. Solow called the residual "technical progress," and levels of education added to its growth. This technical progress contributed considerably more to per capita growth than any increases in capital stock. Denison (1985) built on Solow's model and found that between 1929 and 1982 education accounted for 30% of the per person employment growth in the nonresidential business sector. Similarly, Jorgenson and Stiroh (2000) showed that education contributed 8.7% of total economic growth between 1959 and 1988, and 13% of the growth in output per worker. Moreover, Jones (2002) noted that education is decisive in maintaining the steady increase in the rise in aspects of "technical progress," such as educational attainment and research intensity, in the modern workforce.

While education has long been linked to economic growth, research showing the costs versus benefits of the early care and education industry is relatively recent. This section first explores several prominent studies that overwhelmingly show that over the long run, the benefits of early care and education far outweigh the costs. Adding quality into this equation, the section then examines factors affecting quality in the provision of care and the associated costs. Finally, it examines the literature on how cost affects parental child care choices and then introduces several types of public and private subsidies that can promote the utilization of quality early care and education programs.

Costs versus Benefits of a Quality Early Care and Education System

While the early care and learning industry has demonstrated short- and long-term benefits for children and families as well as for society, the provision of care is not without costs. Research consistently finds that quality early care and education yields long-term benefits that outweigh much of the investment in care. Many studies have attempted to produce cost-benefit analyses of various quality child care initiatives, and all have found that the long-term benefits of quality in child care far outweighed the short-run costs. For instance, the High/Scope Perry Preschool Program, discussed earlier in this chapter, is estimated to have a real internal rate of return of 16% (Rolnick and Grunewald 2003). This means that an investment in early care and education yields a pay-off in terms of economic activity equivalent to 16%, a lucrative return on investment. This section reviews other prominent studies that examine the costs and benefits of quality early care and education programs.

Belfield et al. (2006) estimated the costs and benefits of expanding prekindergarten programs in three states: Massachusetts, Wisconsin, and Ohio. The authors found that high quality pre-K reduced costs in grade school, primarily through decreases in special education placements and grade retention. In Massachusetts, because of pre-K programs, enrollments in special education were predicted to fall between 8.5% and 12%, thus reducing the costs associated with special education. The fiscal benefits were calculated at \$683 million, with costs of \$579 million, generating a 1.18 benefit-cost ratio (each dollar invested generated a \$1.18 return to the state). Of the net fiscal gain of \$105 million, 42% came from savings across the criminal justice system, 30% from the K-12 school system, and 14% from higher earnings in adulthood. The authors calculated that by the time a student finished high school, at least 50% of the initial investment would be recouped. Results in the other two states were even more dramatic. Wisconsin realized a 1.43 benefit-cost ratio, and Ohio saw a 1.62 benefit-cost ratio.

In a more recent study, Bartik (2013) looked at the returns from high quality early childhood programs at the national rather than state level. Nationally, the returns range from \$2.47 to \$3.79 per \$1 invested for early care and education and pre-K. These national economic development benefits are higher than those for any one state because they count the increase in skills and earnings of program participants who as adults move to other states. In comparison, the author found that well-designed business incentives have a return of only \$0.65 for each dollar invested when looked at nationally. Even well-designed business incentives reap part of their state returns by taking away jobs from other states. These programs benefit a state's earnings in part by reducing earnings in other states. Early childhood programs, in contrast, increase national economic productivity by improving the quality of the overall workforce.

As these various studies show, the benefits of investing in quality early care and education programs far outweigh the costs at a societal level, provided that parents and children have access to such care. Given this evidence, it is important to look at whether these calculations occur at the family level.

Costs of Quality

Although the quality and cost of any product or service have long been thought to be positively related, Maynes (1976) definitively showed that the relationship between price and quality depends on the information held by consumers. In the case of early care and education, evidence indicates that quality and cost are positively related (Blau and Mocan 2002).

According to the US Department of Education (2015), the percentage of three to five year olds in preschool programs who attended full-day programs increased from 39% in 1990 to 60% by 2013. More recently, the national full-day enrollment rate was higher in 2013 (73%) than in 2000 (59%) for five year olds. Chapter 2 of this report showed that 86.6% of Georgia's four-year-old population is enrolled in an early care and education program.

Given this rapid increase in the utilization of formal early care, researchers and policy makers are paying attention to the issue of costs and quality care provision in the industry. While a definitive or universal definition of "quality" in early care and education programs is beyond the scope of this study, references are needed for a discussion of costs. Two generally accepted aspects of quality are referenced in the literature that pertain to early care and education providers: process quality and structural quality (Connors and Morris 2015; Hatfield et al. 2015). Process quality encompasses children's interactions with adult caregivers and their exposure to materials that enhance learning. Structural quality refers to objective aspects of the child care environment such as adult-child ratios, teacher education and experience, and facility structure.

Quality of care has been measured in various ways. Two common measures are the Early Childhood Environment Rating Scale–Revised (ECERS-R) and the Infant Toddler Environment Rating Scale–Revised (ITERS-R). Helburn and Howes (1996) used the Cost, Quality, and Child Outcomes in Child Care Centers (CQO) study to summarize the cost of quality for full-time child care centers. The CQO study was conducted in 1993–1994 and examined 401 child care centers that comprised 749 classrooms across California, Connecticut, Colorado, and North Carolina. Using earlier versions of the ECERS-R/ITERS-R and extensive director and teacher interviews related to employee wages and experience, the authors concluded that, on average, the quality of service was mediocre. They found that good child care is based on approved staffing ratios, well-educated staff, low staff turnover, a good adult work environment, and effective leadership by experienced directors. The authors also found that raising quality by 25% (from mediocre to good) would increase total costs by approximately 10%. This translated to 13 cents per child per hour in care, or about \$300 per child annually.

The research to date suggests that there is a wide range of costs associated with "quality." In a four-state study, Blau and Mocan (2002) found that cost rose with wages, age of the center, the level of standards met, higher proportions of infants and toddlers, and for centers serving well-educated parents, but costs were lower in church-affiliated centers. In this study, a one unit increase in quality resulted in 5.6% higher costs. Other studies have shown that costs depend critically on the type of program (age group served, level of need), subsidies, and other factors (Duncan and Gibson-Davis 2006). These complications make it very difficult to determine a "cost of quality" or to analyze the impacts of quality. University of Chicago economist James Heckman's research (Heckman 2000; Heckman and Masterov 2007; Heckman et al. 2006), as well as that of others, suggests very strong net positive benefit-cost ratios associated with investment in quality child care. However, the exact level of benefit relative to cost is difficult to quantify and is dependent on the type of early care program being funded (e.g., pre-K versus infant programs).

Blau and Mocan (2002) estimated that a 10% increase in price would cause for-profit providers to raise quality by 6.6% and not-for-profits to raise it by 4.8%. Therefore, although price may increase only modestly as quality rises, increased demand could have a greater effect.

As more efforts are made in Georgia and in other states to increase the quality of early care and education, it will become easier to determine the effects of quality and the demand for it on the cost of care. In the meantime, families' ability and willingness to pay for early care and education will be major factors in determining the levels of quality available in communities across the state.

Accessing the Benefits: Cost of Child Care

For parents to be able to work, early care and education must be available. While some families have access to informal networks of care including the nuclear family, many parents in the United States must look to care outside the home. The cost of early care and education has become an important part of the calculation of whether parents can afford to work. Higher prices for child care reduce the probability that mothers in particular will work (Anderson and Levine 1999; Han and Waldfogel 2001; Hotz and Kilburn 1994; Kimmel 1998; Tekin 2007). Real child care costs increased more than 70% between 1985 and 2011 (US Census Bureau 2013). Baum (2002) concluded that the cost of care is a deterrent to work for low-income families. Most studies have found that a 10% increase in the price of early care and education would lower the probability that a mother of a young child would work by about 3 to 4 percentage points.

The long-term benefits of early care and education on children may be difficult to rationalize when parents face a child care bill that is a substantial portion of their earnings. This demand-side market failure is one of the factors that make parents responsive to the price of child care. If the cost of care increases, many parents are not able to find the additional money for child care, regardless of the overwhelming benefits in the long run. Therefore, there is a potential role for the public and private sectors to play in subsidizing child care costs to increase the utilization of quality early care and education. Danziger et al. (2004) found that a child care subsidy was associated with a 50% increase in months worked and an over 100% increase in earnings for mothers originally on welfare. Former welfare recipients with young children were 82% more likely to be employed after two years if they received help paying for child care (Danziger et al. 2004). The return on investment estimates reported throughout the literature suggest that subsidies aimed at increasing the use of quality early care and education have a high probability of being cost effective.

State and Federal Support for Child Care

Given the benefits of early care and the responsiveness of parents to the price of care, many states have looked to alternative forms of price subsidies to increase affordability. The most common type of public support for early care and education is in the form of Child and Dependent Care Tax Credits (CDCTC). There is an available nonrefundable federal tax credit of up to \$3,000 for one child and up to \$6,000 for two children. The amount earned is based on a percentage of the child care expenses incurred. Because it is a nonrefundable credit, a family can only benefit from the credit if they owe federal taxes to claim the credit against. Currently, 24 states have enacted their own CDCTC and eight of those are at least partially refundable.²⁶ Georgia has a CDCTC whose eligibility criteria mirror those of the federal tax credit. Georgia's CDCTC allows 30% of the federal child and dependent tax credit, up to \$315 for one child and \$630 for two or more children. Like the federal tax credits, the state tax credits are not refundable.

Another form of state support for child care is providing high quality state-funded prekindergarten programs. All but 10 states offer some form of state-funded prekindergarten with varying degrees of income requirements

²⁶ TaxCreditsforWorkingFamilies.org, a webpage supported by the Annie E. Casey Foundation, provides information on tax efforts that support working families.

(National Institute for Early Education Research 2014). This type of state financial support for early care and education serves two public purposes. First, three and four year olds are provided access to care during the day, paid for by the state, that allows their parent or parents to enter the workforce. Secondly, these programs expose young children to formal early education services to increase the numbers of children entering school prepared.

Georgia was one of the first states to offer a universal prekindergarten program. Georgia's Pre-K Program has become the foundation of Georgia's early education system. The program is open to all four year olds, and the state serves nearly 60% of this population through this program alone. The costs of the 6.5-hour instructional day are covered by the state using earmarked lottery funds, and the program provides parents with economic support and children with a high quality experience. Both of these benefits are an important part of Georgia's early education economic engine. Quality programs such as Georgia's Pre-K are important to the success of children in the long run and, as noted above, the cost-benefit analyses of programs around the country suggest that benefits significantly outweigh the costs of quality.

Based on the data presented in Chapter 3, parent fees per young child (infants through preschool) in this industry in Georgia range from a median of \$3,536 per year to \$7,280 per year (depending on age group, type of child care establishment, and geographic area). The average total yearly expenditure (parent fees, state and federal contributions, private and nonprofit contributions) per child for all children in some form of care is \$7,501 based on survey and administrative data (taking into account grants from federal and state governments and philanthropic institutions as reported in Chapter 2). If the spending were higher, bolstering the level of quality care received by all children in Georgia, the economic impact of the early care and education industry on the overall economy via its direct, indirect, and induced impacts would be larger as well.

FINDINGS RELATED TO GEORGIA'S QUALITY RATED PROGRAM

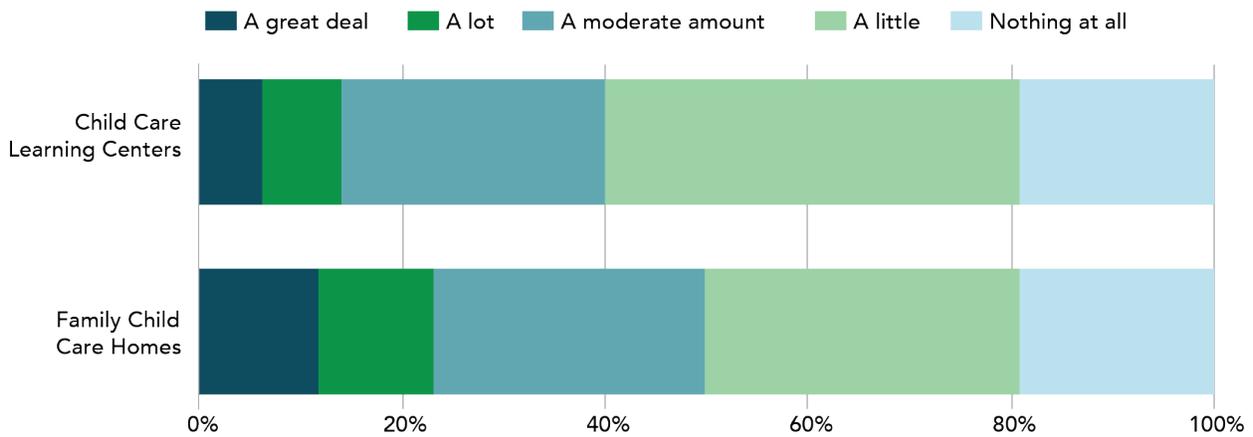
In January 2012, DECAL introduced the state's first comprehensive early care and education rating and improvement system, Quality Rated. With this launch, Georgia joined more than 30 states and local communities that over the past decade have initiated quality rating and improvement systems as a means of promoting, measuring, and monitoring the quality of child care programs (Boller et al. 2015). Quality Rated uses credentialing standards and verification, process and structural standards, and environment rating assessments to rate early care and education programs. "Quality Rated is a systemic approach to assess, improve, and communicate the level of quality in early and school-age care and education programs" in Georgia (Georgia Department of Early Care and Learning 2015, p. 3). Similar to rating systems for other service-related industries, Quality Rated assigns a star rating (one, two, or three stars) to participating early care and education programs. As of October 2015, Quality Rated has assessed more than 800 programs statewide.

By August 2014, when DECAL prepared the survey recipient list of all licensed child care centers and family child care homes in the state, approximately 8% of the centers and 5% of the family child care homes had completed the application and review process and had received a star rating from Quality Rated. All questionnaires included in the early care and education survey contained three general questions about Quality Rated in order to assess the opinions of all programs about Quality Rated. Questionnaires sent to Quality Rated programs contained five additional questions about their experiences with and opinions of Quality Rated. The rated programs had disproportionately high rates of responses. The following discussion provides insights about Quality Rated from the point of view of all center and family child care home respondents and then focuses on the opinions of the centers and homes that were early participants in Quality Rated. Note that Quality Rated has grown quickly since the survey was conducted. As of October 2015, more than 40% of licensed early care and education programs were participating in Quality Rated and over 15% had received a star rating.

Opinions of All Responding Programs

An important goal of Quality Rated is to ensure that parents are informed about the quality of child care programs so that they can make educated choices for their families. Thus, knowledge about Quality Rated among parents is vital if the system is to be effective. All programs were asked how much they thought families knew about Quality Rated. Figure 5.1 indicates that at the time of the survey fewer than 20% of programs felt that their families were well-informed about the new rating system. Approximately a third (36.1%) of respondents evaluated families as knowing a little about Quality Rated, and 26.3% a moderate amount. About a fifth of respondents assessed families as knowing nothing at all about the program.

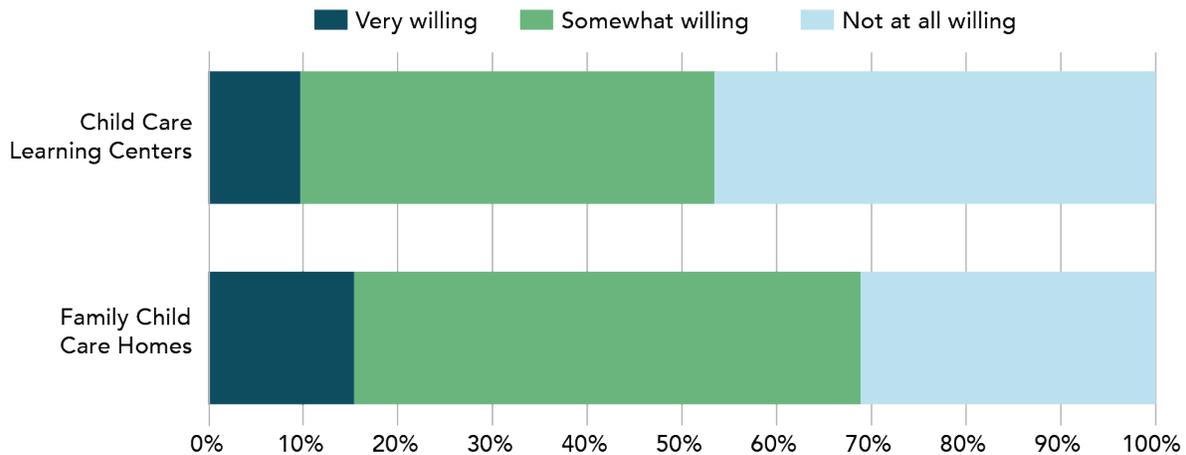
Figure 5.1. How much do families know about Quality Rated?



As discussed earlier in this chapter, increasing quality can also increase costs. Thus, it is important for policy makers to understand whether Georgia parents are not only able but also willing to pay more for higher quality early care and education. If the goal is to increase quality and parents are unable or unwilling to pay more, options such as increased subsidies, the Child and Dependent Care Tax Credits, or other forms of tax credits could be explored.

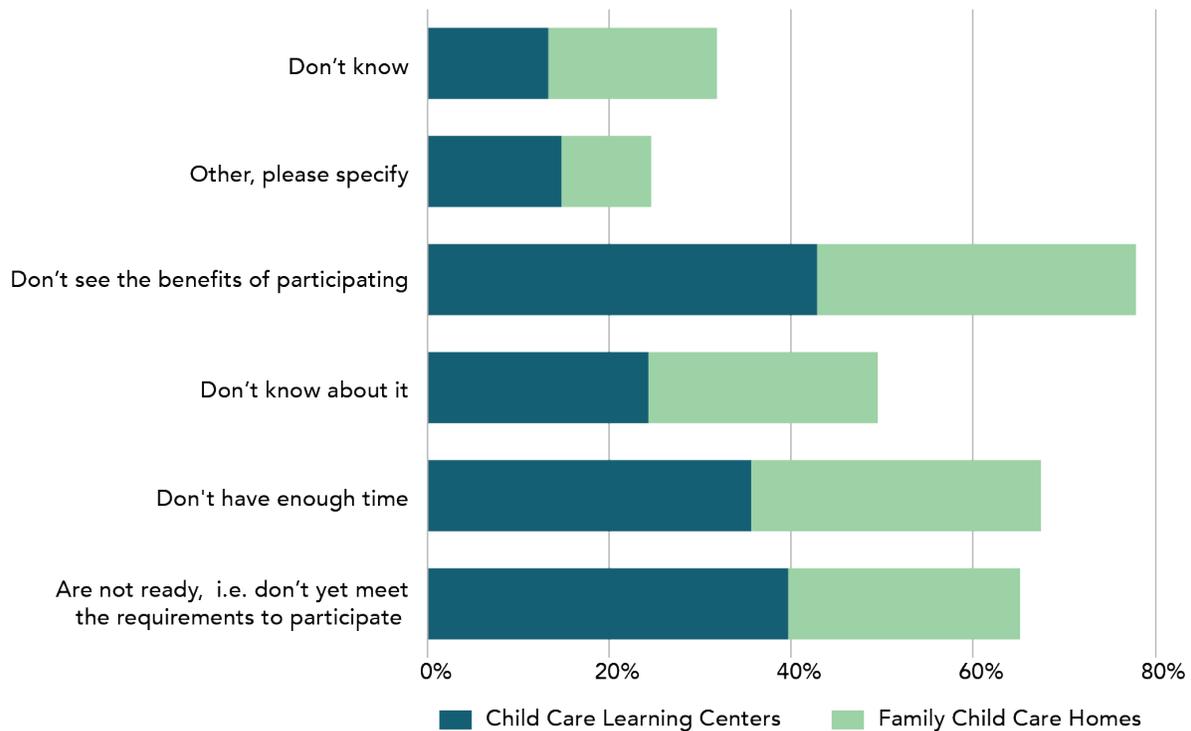
To get a feel for parents’ willingness to pay more for quality, all center- and family-based programs were asked their opinions about how willing their families would be to pay more for Quality Rated child care. Although relatively small percentages of programs indicated that their families would be very willing to pay more for Quality Rated, 53.5% of responding family child care homes assessed their clients as being “somewhat willing” and 31.3% as “not at all willing” (Figure 5.2). Center-based programs were more divided in their opinions—43.9% indicated that their families were “somewhat willing” and 46.5% as “not at all willing” to pay more for Quality Rated care.

Figure 5.2. How willing are your clients to pay more for Quality Rated child care?



Quality Rated is voluntary for early care and education programs, but as the number of programs participating increases, programs are likely to feel the need to participate in order to stay competitive. Because Quality Rated was fairly new when the survey was distributed, the questionnaire asked why some programs might choose not to participate in the system. The largest groups of center- and home-based programs surmised that their peers may have not yet seen Quality Rated’s benefits. Figure 5.3 also indicates that 33.8% of programs suggested that their peers’ time pressures had prevented their participation. Another 32.9% suggested that their peers were still preparing to meet the requirements to participate in Quality Rated.

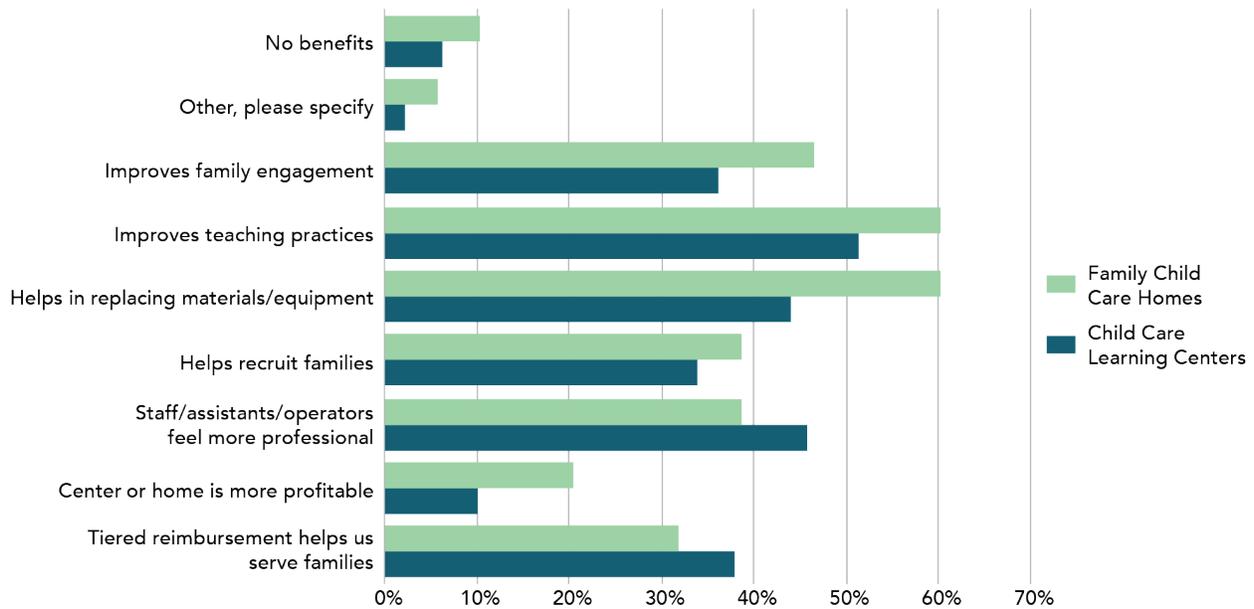
Figure 5.3. Why do you think some programs choose not to participate in Quality Rated?



Opinions of Early Adopters of the Quality Rated Program

Although the program was in its early stages during the survey period, when asked how Quality Rated had benefitted their center or home, 51.4% of center-based and 60.2% of home-based respondents who were participating in the program at that time believed it was already improving teaching practices in their early care and education programs (Figure 5.4). An equal percentage of family-based respondents cited Quality Rated’s contributions toward helping replace materials or equipment as a benefit, as did 44.1% of center-based respondents. The second largest set of center-based respondents (45.8%) asserted that Quality Rated had influenced feelings of professionalism compared with 38.6% of home-based providers.

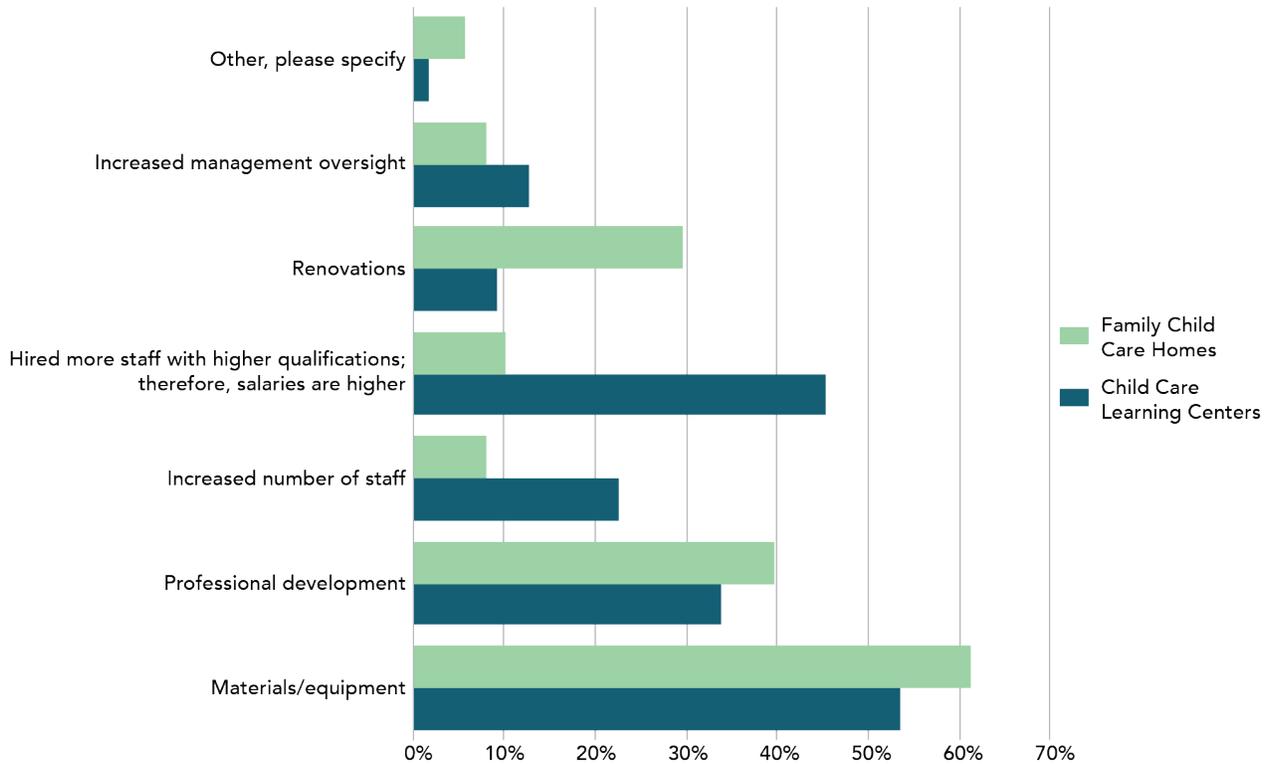
Figure 5.4. How has participating in Quality Rated benefitted your center or home, or how do you expect it to benefit your center or home?



Note: Tiered reimbursement is a bonus awarded to Quality Rated programs that have achieved a star rating and provide early care and education for families that receive CAPS subsidies.

Because participating in Quality Rated can have some related costs for providers, the survey asked the early Quality Rated providers about them. Figure 5.5 shows that center- (53.5%) and family-based (61.4%) participants were most likely to identify materials and equipment costs as one of the largest expenses associated with Quality Rated. Other costs varied because of the nature of the businesses of centers and homes. For centers, the second most frequently mentioned cost (45.3%) was higher salaries resulting from hiring more staff with higher qualifications, whereas family providers (39.8%) cited professional development as one of their top costs of participation.

Figure 5.5. What have been the two largest costs to your center or home as a result of participating in Quality Rated, or what do you expect the two largest costs will be?



Quality Rated respondents gave their opinions about Quality Rated’s effects on their classrooms as well. Figure 5.6 shows that more than 60% of center- and home-based programs indicated that their classrooms are better stocked with materials for children as a result of participating in Quality Rated. More than half of home-based respondents and more than 40% of center-based respondents felt that classroom spaces and furnishings are better arranged and organized to meet children’s needs and that the classroom structure helps children spend more time engaged in purposeful activities. Nearly half of center-based (48.3%) and 31.8% of home-based respondents have seen an increase in teacher-child interactions with Quality Rated, and more than a third (36.3%) on average have more planned activities to engage families. Approximately 11% of both types of programs claimed that Quality Rated has not affected their classrooms.

Figure 5.6. How has participating in Quality Rated affected the classrooms in your center or home?

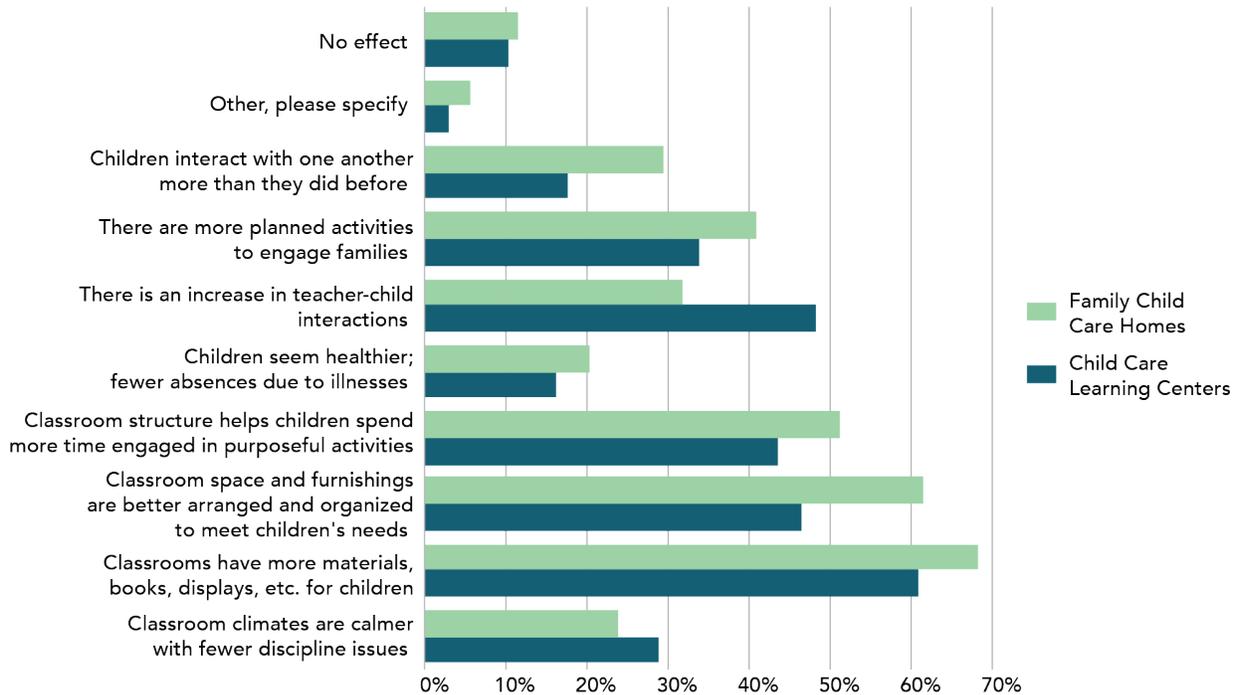
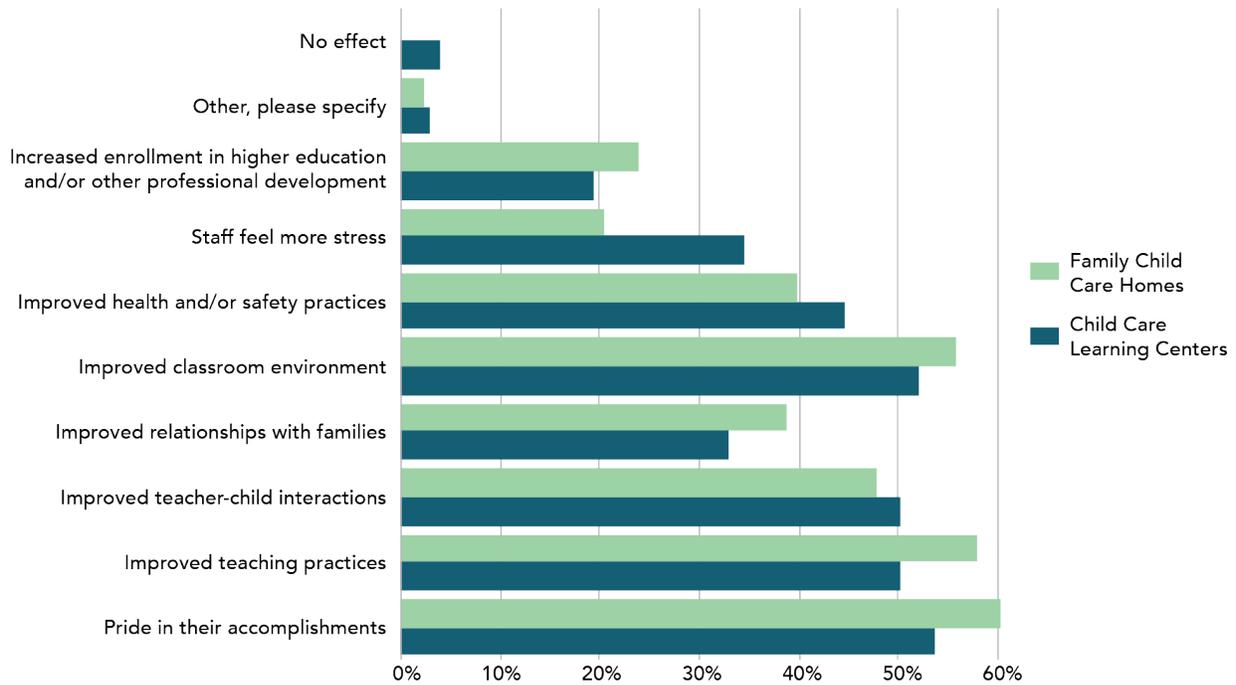


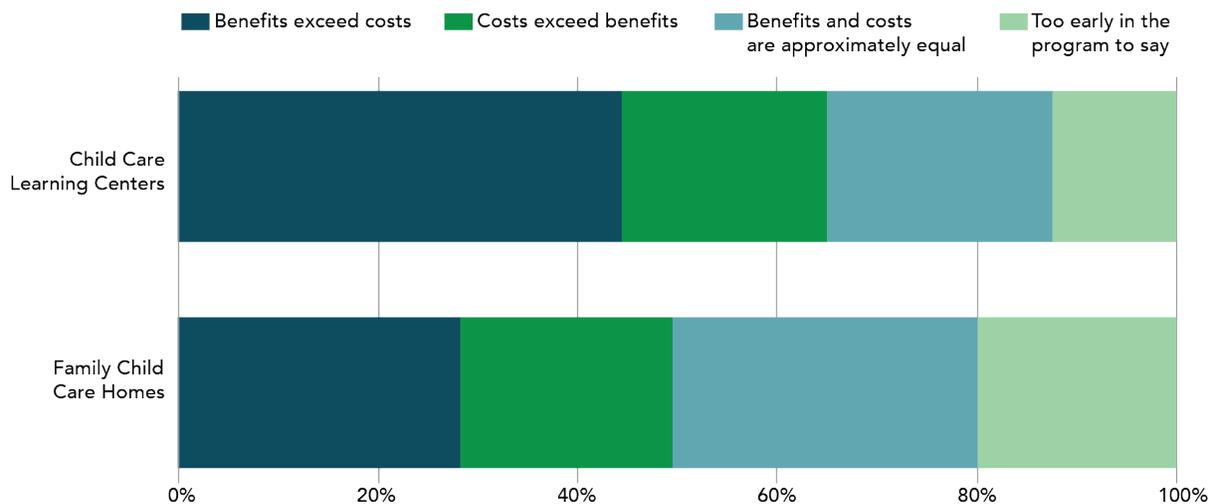
Figure 5.7 shows that the majority, on average, of both center- and home-based programs found that Quality Rated has had positive effects on their staff, including taking pride in their accomplishments (55.8%) and improving classroom environments (53.2%), teaching practices (52.8%), and teacher-child interactions (49.4%). No family-based and only 4% of center-based programs contended that they have seen no effects on their staff from participating in Quality Rated.

Figure 5.7. How has participating in Quality Rated affected your center’s staff or you and your paid assistants or substitutes?



Overall, Quality Rated respondents reported that the benefits of participating in the program exceed or equal the costs. Figure 5.8 shows that among center-based respondents, 44.4% evaluated benefits as exceeding costs, while 28.2% of family-based respondents did so. Family-based respondents (30.6%) were more likely to see benefits and costs as approximately equal, whereas 22.5% of center-based respondents did. Roughly an average of 20% of respondents thought that the costs exceed benefits, and 15% believed it was too early to say.

Figure 5.8. Bottom line: How do the benefits and costs of Quality Rated compare?



Based on the responses of early adopters of Quality Rated in Georgia, the program looks promising. Center- and family-based respondents reported that participating in Quality Rated improves teaching practices, helps in replacing materials and equipment, encourages teacher-child interactions, enhances classroom spaces, and improves staff professionalism. The largest costs of participating thus far include the purchase of materials and equipment. In addition, respondents participating in Quality Rated reported that the benefits of participating in Quality Rated exceed or equal the costs.

CONCLUSION

The long-term effects of the early care and education industry on parents and children are notoriously difficult to estimate. However, the existing empirical literature is quite clear that beyond its short-term direct impacts on the economy, the industry produces several layers of long-term benefits that have monetary implications.

- The industry benefits children by improving outcomes in education, increasing labor market opportunities, and enhancing health outcomes over time.
- The industry benefits families by increasing employment options, leading to higher wages, and by increasing job security and reducing absenteeism.
- The industry also has important benefits for society, including improved education outcomes for children, better labor outcomes for children and parents, and increased tax revenue.

Research consistently finds that quality early care and education yields long-term benefits that outweigh the short-run costs. Increasing quality in early care and education is not free, however. The research presented in this chapter indicates that the state is likely to benefit from quality early care and education through lower education costs for remedial K-12 education, lower justice-related costs due to crime prevention, higher earning power, and better health of its citizens. The extra costs of improving quality will vary depending on multiple factors. While some parents have the ability and willingness to pay for increased quality, many others may have the willingness but lack the ability to pay. Without support from the public sector, such quality increases could reduce access to early care and education for some parents due to increased costs. Options to expand the scope of quality early care and education include reducing the cost through subsidies and encouraging employer-sponsored early care and education.

Quality Rated, the state's new quality rating and improvement system for early care and education programs, is already showing signs of increasing quality in the industry. Early adopters of the program found that several aspects of their child care environments have improved, including teaching practices, resources, and staff professionalism. Given the extensive research showing the benefits of such improvements, the industry's long-term prospects look good as more and more programs participate in Quality Rated.



Chapter Six Conclusion

The early care and education industry in Georgia is a significant contributor to the overall economic activity of the state. This study has documented that the direct spending by families, the public sector, and philanthropic institutions generates a direct economic impact of \$2.45 billion annually. The indirect economic impact (interindustry trade between the early care and education industry and other industries) adds an additional \$907 million to Georgia's economy. Finally, the induced effect (the economic activity associated with the consumption and investments of employees of all involved industries including early care and education) is another \$1.34 billion. Overall, the early care and education industry generates \$4.7 billion of total economic activity in the state annually. This puts the industry ahead of the important home healthcare services industry and on par with business support services.

The industry has long-term economic impacts as well. These impacts come from enabling parents to engage, productively and consistently, in the workforce. These families pay taxes and make continued contributions to Georgia's economy. The industry benefits children by fostering cognitive and social development, school readiness, and health and well-being, thereby contributing to the long-term economic development of the state.

Data from a detailed survey of child care learning centers, family child care homes, and schools offering the Georgia's Pre-K Program were used to estimate the short-term economic impact of the industry, which includes programs serving children birth through age five years as well as school-age children up to age 13 served in after-school, before-school, and summer programs. All forms of licensed or regulated care in Georgia were surveyed and analyzed.

SHORT-TERM ECONOMIC IMPACT

Among the compelling economic outcomes presented in this report, a few highlight the early care and education industry's magnitude in Georgia.

- The total level of gross receipts of the industry for a 12-month period is an estimated \$2.45 billion.
- The additional economic activity associated with the industry adds another \$2.24 billion to Georgia's economy annually. Thus, the industry generated \$4.7 billion of economic activity in the state for 2013, putting it on par with industries such as pharmaceutical preparation manufacturing, printing, and health and personal care retail stores.
- A conservative estimate of the level of parents' annual earnings that are supported by the availability of child care in Georgia is \$24 billion.
- Through employment and other spending in the industry, and by fueling expansions in other sectors of the economy, the industry generates \$374 million in federal tax revenue and \$161.7 million in state and local tax revenues.
- Early care and education provides 67,507 jobs in the industry itself and generates an additional 17,454 jobs in other market segments.
- The early care and education industry in Georgia provides care for an estimated 337,024 children in the state each year.
- Georgia has more than 6,300 licensed or regulated for-profit and not-for-profit early care and education centers, family child care homes, group child care homes, Georgia's Pre-K programs, military family child care homes, Head Start and Early Head Start sites, and military early care and education centers.

THE EARLY CARE AND EDUCATION INDUSTRY IN GEORGIA

As part of this report, all licensed or regulated early care and education programs in Georgia received a questionnaire titled Georgia's Early Care and Education Economic Impact Survey. The data acquired through the responses from more than 3,200 child care programs to this survey not only supplied vital input for the economic analysis, they also provided important information about the early care and education industry in Georgia.

Below are a few of the key findings about the early care and education highlighting that may be of particular interest to state and local policy makers.

- Child care learning centers and family child care homes serve children of need—68.9% of children in school-based Georgia's Pre-K programs receive free or reduced-price lunch. One-fifth (19.7%) of children attending center-based programs and 20.2% of children in family child care homes receive CAPS subsidies.
- More than 80% of centers and 95% of family child care homes operate on a 12-month basis; at least 11% of family child care homes and 3% of centers offer care on weekends.
- The median weekly parent fee for infants under six months of age ranges from \$85 to \$135 for family child care homes and from \$90 to \$179.50 for centers, based on geographic area.
- The industry serves children of all races and ethnicities, but the percentage of Non-Hispanic Black children in care represents a larger portion than their proportion in the state's overall population.
- The median wage for administrators in centers is \$15 per hour; lead teachers in Georgia's Pre-K classrooms earn a median of \$16 per hour, and other teaching staff earn a median of \$8 per hour. In family child care homes, the median hourly wage for paid assistants is \$8. Public schools offering Georgia's Pre-K pay administrators a median hourly wage of \$64.78 statewide, and lead teachers earn a median hourly wage of \$27.64.
- Paid holidays, paid leave, free or reduced-price care for dependents, and paid time off for training and education are among the benefits most often offered by child care learning centers. Nearly all public schools offering Georgia's Pre-K provide paid leave, health insurance, retirement plans, and paid time for training and education to their full-time employees.
- Turnover seems to be an issue in the early care and education industry, with 80% of responding centers and 93% of responding schools reporting that one or more permanent employees left during the year prior to the survey. Centers and schools experiencing such losses lost an average of five employees.

GEORGIA'S QUALITY RATED PROGRAM

In 2012, DECAL launched Quality Rated, the state's quality rating and improvement system for early care and education programs. As part of this economic impact study, directors of child care learning centers and owners of family child care homes who were among the first to adopt Quality Rated assessed it based on their experiences with the program. On average, 40% or more of responding center directors and family child care home owners regarded participating in Quality Rated as beneficial because it has improved teaching practices or has helped in replacing materials and equipment or is expected to do so. Other benefits cited by respondents included helping children spend more time engaged in purposeful activities, enhancing classroom spaces, and improving staff professionalism. In addition, respondents participating in Quality Rated reported that the benefits of participating in Quality Rated approximately equal the costs.

THE INDUSTRY AFTER THE GREAT RECESSION

This report also provided demographic analyses of population and economic trends in Georgia with a focus on the post Great Recession period. The negative effects of the Great Recession on Georgia's economy and the early care

and education industry were still evident at the time of this study. Georgia experienced shrinking economic output, increasing unemployment, and declining numbers of licensed programs. The recession affected different industries to varying degrees and in its aftermath, the share of parents working in particular industries and occupations have shifted, potentially changing the demand for early care and education in unpredictable ways.

Not surprisingly, Georgia's early care and education programs also felt the effects of the recession, primarily through decreased enrollment. With unemployment reaching 10.5% in 2010, many parents were out of work, likely decreasing the demand for child care. To endure the recession, center- and home-based programs implemented strategies such as waiving late fees and postponing improvements to facilities or purchases of new toys and equipment.

As the economy recovers and Georgians return to work, the demand for early care and education will likely grow. This already seems to be happening, as 46% of centers and 25% of family child care homes describe enrollment as having returned at least somewhat. About a quarter of programs are starting to make improvements to facilities or replace toys, equipment, or materials.

Other demographic trends were also evident during this time. Between 2010 and 2015, the population of children birth to age four steadily declined, lowering the number of children available to serve. If current forecasts are accurate, the population of young children in Georgia will start to grow again after 2015, potentially increasing the demand for child care.

Georgia has also experienced growing shares of children living in single-parent households as well as with parents who hold higher degrees. Both types of households are expected to have more interest in and need for early care and education, creating more market demand. Georgia is quickly becoming one of the most racially diverse states in the country. The effect that growing racial diversity could have on this industry is hard to know or predict. However, to the degree that different races or ethnicities have different needs and preferences for early care and education, the marketplace will have to adjust to meet this demand.

All signs point to impending increases in demand for early care and education in Georgia, and this industry is expected to be one of the fastest growing job producers in the state over the next five years. The ability of the industry to adjust to more demand in the marketplace and potential changes in the types of services and care provided will be critical in the near future.

LOOKING FORWARD

In conclusion, this study demonstrates the important place that the early care and education industry holds in Georgia's economy. Even in an economy still recovering from the Great Recession, this is a multibillion dollar industry that supports over 85,000 jobs and generates hundreds of millions of dollars in tax revenue. It supports billions of dollars in parents' earnings by providing access to child care. This is all in addition to providing education and care for more than 330,000 of Georgia's youngest and most precious citizens. Research has shown the measurable and significant positive effects of quality early care and education on children's cognitive development and parents' ability to work as well as improved adult outcomes for the children who received early quality child care. As Georgia's economic recovery grows, there will be increased demand for quality care for children to support their early education and parents' labor market activity. Ensuring equitable distribution of quality child care will be challenging to the state and will also offer opportunities for new partnerships, among other innovations. This study makes clear the fact that Georgia's leaders, policy makers, and business community members should consider the short- and long-term importance of this industry moving forward.

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Bright from the Start: Georgia Department of Early Care and Learning is responsible for meeting the child care and early education needs of Georgia's children and their families. It administers the nationally recognized Georgia's Pre-K Program, licenses child care centers and home-based child care, administers Georgia's Childcare and Parent Services (CAPS) program and federal nutrition programs, and manages Quality Rated, Georgia's community-powered child care rating system.

The department also houses the Head Start State Collaboration Office, distributes federal funding to enhance the quality and availability of child care, and works collaboratively with Georgia child care resource and referral agencies and organizations throughout the state to enhance early care and education. For more information, go to www.dec.state.ga.us.



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