Economic Impact of the Early Care and Education Industry in Georgia

Child Policy Partnership

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Executive Summary

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

- enables parents to engage in the workforce, allowing them to financially care for their families while contributing federal, state, and local taxes.
- benefits children in terms of cognitive and social development, school readiness, and health and well-being, thereby contributing to the long-term economic development of the state.

Evidence from leading researchers, including Nobel-prize winning economists and Federal Reserve Bank analysts, consistently point to the economic importance of laying a strong foundation in early childhood (e.g., Heckman, 2000; Rolnick and Grunewald, 2007; Wolfe and Tefft, 2007).

The primary objective of this report is to quantify the daily economic activity, which we call the short-term economic impact, of the early care and education industry in Georgia. The important findings from this analysis are:

- **The total annual level of gross receipts of the industry for a 12-month period is estimated to be $2.4 billion.**
- The additional economic activity associated with the industry adds another $1.7 billion to Georgia's economy. Thus, **the industry generates $4.1 billion of economic activity in the state each year** and is on par with industries such as computer and electronic product manufacturing; the arts, entertainment, and recreation industries; and pharmaceutical manufacturing.
- A conservative estimate of the level of parents' annual earnings that are supported by the availability of child care in Georgia is $13.6 billion—but may be as large as $32.7 billion.
- Through employment and other spending in the industry, and by fueling expansions in other sectors of the economy, the industry generates $117 million in federal, state, and local tax revenues.
- Early care and education provides 61,203 jobs in the industry itself and generates an additional 12,900 jobs in other market segments.
- The early care and education industry in Georgia provides care for an estimated 383,379 children in the state each year.
- There are over 10,000 licensed or regulated for-profit and not-for-profit early care and education centers, family child care homes, group child care homes, pre-kindergarten programs, military family child care homes, Head Start sites, and military early care and education centers.

A unique survey of early care and education providers was developed for this report. The data acquired through this survey not only supply important input for the economic analysis, they also present a profile of the industry in Georgia:

- The industry serves children of all races and ethnicities, but the percentage of black children in care represents a larger portion than the proportion of black children in the state at large.
- Centers and family child care homes serve children of need—45% of children in centers and 24% of children in family child care homes receive free or reduced-price lunch.
- Most centers and family child care providers operate on a 12-month basis; 40% of family child care providers and 30% of centers offer care on Saturdays, Sundays, and/or holidays.
- The average weekly parent fee for infants ranges from $70 to $120 for family child care homes and from $80 to $145 for centers, based on geographic area.

- The average wage for administrators in centers is $13.57 per hour; lead teachers earn an average of $10.45 per hour; and other teaching staff earns, on average, $7.94 per hour. In family child care homes, the average hourly wage for paid assistant caregivers is $7.09. Paid leave, paid holidays, and paid time-off for training are among the benefits most often offered by centers.

In addition, this report provides a summary of the current research on the long term benefits to children, parents, and society of early care and education. Heckman (2000), Heckman and Masterov (2004), and Heckman, Grunewald, and Reynolds (2006) are among those who provide a detailed analysis and cost-benefit calculation of the returns to early education taking into account that the benefits to parents and children 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. This report also presents a discussion about the magnitude of and the ways in which high quality early care and education increases the economic impact of the industry. Quality increases the economic impact of the industry both 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, by making Georgia's future workforce as productive as possible.

The early care and education industry in Georgia is a multi-billion dollar industry. The industry generates significant amounts of economic activity on a daily basis by buying goods and services needed to run their businesses; by providing employment to teachers, administrators, and a variety of support staff; and by providing additional economic activity through monies spent by the industry itself and industries directly related to early care and education.

Chapter 1 – Introduction

The early care and education industry is an important part of Georgia's economy. The industry enables parents to engage in the workforce, allowing them to care for their families financially as well as to contribute federal, state, and local taxes that, in turn, provide needed goods and services to the population at large. The industry benefits children in terms of cognitive and social development, school readiness, and health and well-being, thereby contributing to the long-term economic development of the state. Finally, as an industry, it generates significant amounts of economic activity on a daily basis. Georgia's child care environments provide employment to teachers, administrators, and a variety of support staff, all of whom spend money, thereby providing additional economic activity in the state. As part of the economic fabric of Georgia, the early care and education industry may be unparalleled in terms of its support of short- and long-term economic development in the state.

This report was commissioned by Bright from the Start: Georgia Department of Early Care and Learning (BftS). The primary objective of this report is to quantify the short-term economic impact of the early care and education industry. This report includes an economic model that estimates a dollar figure, which represents the amount of economic activity generated by providers for a 12-month period through their employment of teachers, support staff, contractors for special services, and the like.[1] In addition, this report provides a summary of the current research on the contributions of the industry that are more difficult to quantify and those with longer term benefits: the benefits to parents and to children and to society at large. Finally, this report presents a discussion about the magnitude of and the ways in which high-quality early care and education increases the economic impact of the industry. Quality increases the impact of the industry both 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, by making our future workforce as productive as possible.

The information offered in this report will provide administrators, policymakers, and citizens with a better understanding of the complex contributions of this industry to the state so that evidence-based decisions can be made for the benefit of the Georgia community.

State governments have three main reasons for taking a leading role in the support of the early care and education industry. First, promoting and subsidizing child care encourages parents to work. This increases the likelihood that parents from low-income households will become economically self-sufficient and thus employed and not enrolled in the welfare system (Blau and Tekin, 2007; Danziger et al., 2004). Second, if the state is to encourage parents to work and enroll their children in child care programs, it is vital that parents have the knowledge to make informed decisions about child care options. For example, parents often are not aware of the benefits and characteristics of high-quality care (Cryer and Burchinal, 1997). The government plays an important role in the dissemination of information about the benefits and the characteristics of quality care, as well as regulating providers to ensure quality. Third, and perhaps most important, quality child care benefits children in terms of cognitive and social development, school readiness, and health and well-being. These benefits to children accrue to society through greater productivity growth and lower public expenditures on welfare, criminal justice, and special education (see for example, Heckman 2000). Evidence from leading researchers, including Nobel-prize winning economists and Federal Reserve Bank analysts, consistently point to the economic importance of laying a strong foundation in early childhood (e.g., Heckman, 2000; Rolnick and Grunewald, 2007; Wolfe and Tefft, 2007). Parents do not typically consider these benefits when they are choosing whether or not to enroll their children in a child care program, but rather base their decision only on their own personal cost-benefit calculation. The information offered in this report will provide administrators, policymakers, and citizens with a better understanding of the complex contributions of this industry to the state so that evidence-based decisions can be made for the benefit of the Georgia community.

[1] Data collected cover 2005, 2006, and 2007 due to differences in the timing of various sources. However, in all cases, the data presented in this report cover a 12-month period.

A number of economic analyses of the early care and education industry in individual states have been developed since the early 2000s. Studies in New York, New Jersey, Ohio, Kansas, North Carolina, and many other states find that the early care and education industry is a major economic factor in terms of its impact on overall spending, employment, and tax revenue. These studies often conclude that despite relatively low salaries within the early care and education industry, the industry itself ranks among more well-touted sectors of the economy, such as motor vehicle manufacturing and investment banking and securities, in terms of economic significance. When the long-term impacts of the early care and education industry are added to the short-run economic effects, researchers are hard-pressed to find another industry that adds as significantly to long-run economic development.

This report focuses on early care and education for Georgia's children birth through age 13.[2] The analysis includes all licensed and/or regulated care, including centers and family child care homes. Licensed after-school programs are included as well as year-round and summer programs. Non-licensed, non-regulated care is not included in this analysis.

Chapter 2 presents an economic model used to calculate the immediate impact of the early care and education industry on Georgia's economy and provides estimates of the short-term economic impact of the early care and education industry in Georgia. Chapter 3 discusses the economic impact of child care on consumers (parents and children). In chapter 4, published research is presented to highlight the potential costs and benefits of quality care and the short- and long-term economic impacts of quality care. Chapter 5 shows the importance of the early care and education industry in Georgia by presenting trends and changes in the state's population and economy that affect the need for and use of child care in Georgia. In chapter 6, a profile of the current state of the industry is presented, using unique survey data developed for this report. 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.

[2]While surveys were sent to Georgia's Pre-K Program sites in public schools, only children in the Pre-K classrooms are reflected in this data and not children in the elementary grades.

Chapter 2 – Short-Term Economic Impact Through Providers

The early care and education industry in Georgia is an important economic engine in the state. This chapter captures the early care and education industry's contributions to Georgia's fast growing economy through the economic activity generated by the providers of early care and education. This chapter develops and discusses the following short-term impacts of the industry in Georgia:

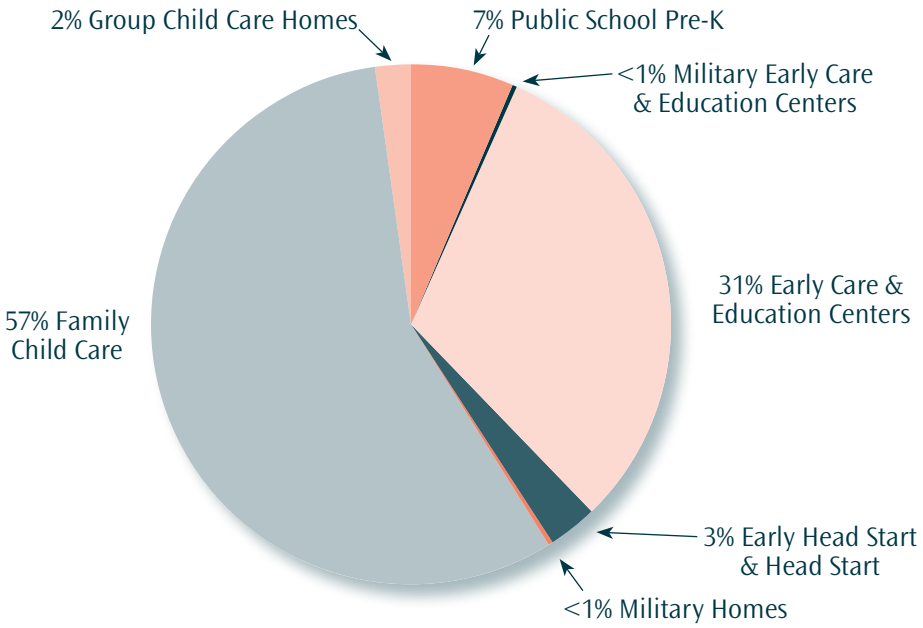
- **The industry generates $2.4 billion in gross receipts each year.**
- There are over 10,000 licensed for-profit and not-for-profit early care and education centers, family child care homes, group child care homes, pre-kindergarten programs, military family child care homes, Head Start sites, and military early care and education centers.
- Georgia's early care and education industry cares for an estimated 383,379 children each year.
- The industry employs 61,203 individuals directly, and an additional 12,900 jobs are generated as a result of the economic activity in the early care and education industry.[3]
- **The total addition to Georgia's economy from the early care and education industry is $4.1 billion annually (not including additional long-term benefits).**
- A conservative estimate of the level of parents' annual earnings that are supported by the availability of child care in Georgia is $13.6 billion—but may be as large as $32.7 billion.
- The size of the sector in terms of economic activity puts it on par with industries such as computer and electronic product manufacturing; motor vehicle parts manufacturing; the arts, entertainment, and recreation industries; and pharmaceutical manufacturing.

This chapter begins with a discussion of the size of the early care and education industry in terms of the number of providers, the number of employees, the number of children served, and the number of parents served. The chapter then goes on to estimate the economic impact of the industry on the overall Georgia economy. This includes an examination of the direct effects that the industry has on the economy in terms of gross receipts. These include parent fees, federal and state funding, and donations as well as a comparison of this industry with other industries in Georgia. The chapter concludes with the use of an economic model, the IMPLAN model, that goes beyond gross receipts and also estimates the *indirect effects* (increased demand for goods and services by the early care and education industry) and *induced effects* (changes in spending that result from changes in the income of employees in the early care and education industry and those industries that supply goods and services to the early care and education industry) of the industry in Georgia.

For purposes of this study, the early care and education industry is defined as early care and education centers, group child care home providers, family child care home providers, Early Head Start and Head Start sites, Georgia's Pre-K Program classrooms regulated by Bright from the Start, and military early care and education centers. Much of the data cited in this chapter and throughout the report are derived from Georgia's Early Care and Education Economic Impact Survey, a detailed survey of the population of early care and education providers in Georgia conducted in 2007. This survey was developed specifically for this report to fill gaps in knowledge about the industry not available from any existing sources. Chapter 6 of this report focuses on this survey and its findings.

[3] An earlier estimate of the employment multiplier effect was reported as 13,500 jobs. However, after further data cleaning was done, the estimated impact is 12,900.

Figure 1. Distribution of Child Care Establishments in Georgia (2006)



Source: BftS Administrative Data (2007)

Note. Total Establishments: 10,299 (This figure is based on the original data file of 10,373 establishments and we eliminated those establishments for which the survey was returned unopened.) Totals may not add to 100% due to rounding.

Size of the Sector

Number of Providers. In Georgia, there are over 9,000 licensed private for-profit and not-for-profit early care and education centers and registered family child care homes. In addition, there are 247 group child care homes, 339 Early Head Start and Head Start sites, 24 military early care and education centers, 717 Georgia's Pre-Kindergarten Program sites located in the public school system, and 44 military family child care homes.[4] Family child care homes are the largest subgroup of child care establishments and include 5,831 individual licensed homes while there are 3,171 private for-profit and not-for-profit early care and education centers in Georgia (BftS supplied data, 2007). In addition to other responsibilities, BftS licenses and monitors all center- and home-based child care facilities, administers Georgia's Pre-Kindergarten Program, and provides technical assistance to child care providers. Some child care environments, such as Early Head Start and Head Start, are also responsive to federal policies, regulations, and monitoring.

Figure 1 provides a synopsis of the types of early care and education establishments in Georgia. It is important to note that these do not include informal care and other unlicensed providers.[5] As seen in Figure 1, family child care homes account for 57% of all establishments. The National Association of Child Care Resource and Referral Agencies (NACCRRA, 2007) reports that Georgia is similar to other states in terms of its relative ratio of center-to-family establishments.

Early Head Start and Head Start are federally funded programs, regulated by the federal government. In Georgia, there are 339 Early Head Start and Head Start sites that serve approximately 23,500 children (U.S. Department of Health and Human Services [DHHS], 2008). The federal government expenditures on these programs in 2007 were $169 million (DHHS, 2008). The state-funded Georgia's Pre-K Program (Pre-K) was one of the earliest publicly funded Pre-K programs in the United States. It was initiated as a pilot program in 1992 and then expanded to include 8,700 at-risk 4-year-old children in 1993. Georgia's Pre-K Program became a universal program in September 1995 and currently is administered by BftS and funded by the Georgia Lottery for Education. The Program currently serves over 75,000 children in Georgia during the school year.[6] Georgia's Pre-K Program classrooms are located in public schools and private child care centers, many of which offer care before and after the typical school day.

[4]Based on data provided by Bright from the Start (BftS) for this report.

[5]Informal child care is defined as unlicensed and unregistered care usually involving a relative, friend or neighbor.

[6]BftS tabulations of actual Pre-K enrollment by county.

Level of Employment. Another way to measure the size and importance of the child care sector in Georgia is by the level of employment. The U.S. Economic Census (2002) and County Business Patterns (U.S. Census Bureau) report employment by sectors of the economy for states and other geographic areas. According to the County Business Patterns, 32,813 individuals are employed in the early care and education industry in Georgia. Since the County Business Patterns estimates are provided for all industries, they may provide a useful benchmark to view the relative economic importance of the early care and education industry.[7] However, based on data from Georgia's Early Care and Education Economic Impact Survey, employment in the early care and education industry is estimated to be 61,203. The County Business Patterns estimates understate the level of employment as they do not include all self-employed individuals, they do not include some support staff and ancillary employees such as janitors and drivers, and they do not include teachers in public schools.

The data in Table 1 provide the reported level of employment by industry for 10 industries in Georgia. These data are based on the most recent County Business Patterns (2005). Total employment in Georgia is estimated at 3,489,046 for the same period (County Business Patterns, 2005). County Business Patterns reported employment in "Child Day Care Services" is on par with other large industries including trucking, textile mills, and air transportation. Considering the data from Georgia's Early Care and Education Economic Impact Survey, the level of employment in child care services is closer to 61,203, which puts the early care and education industry employment numbers closer to that of food manufacturing. Employment in this industry is twice as large as the growing home health care services and business support services. Georgia Department of Labor's Georgia Workforce Trends (2004) estimates that another 12,200 child care jobs would be added by 2014.

Table 1. Employment in Georgia by Industry as Reported by County Business Patterns (2005)

Industry	Employment
Performing arts, spectator sports, & related industries	7,466
Air transportation	29,671
Child care services	**32,813**
Textile mills	33,424
Freight trucking, long-distance	35,959
Commercial banking	49,071
Food manufacturing	61,862
Food & beverage stores	95,242
Full service restaurants	136,912

Source: U.S. County Business Patterns (2005)

According to the U.S. Bureau of Labor Statistics (BLS, 2007), wages paid to those in child care occupations are relatively low. BLS reports that even for the higher level administrative staff in child care, there are large wage disparities compared to the "elementary and secondary" administrative occupations. In 2006 in Georgia, BLS reports that the average annual wage of educational administrators in "preschool and child care" was $34,120 while it was $76,750 for educational administrators in "elementary and secondary education" (BLS, 2007). For non-management occupations, the estimated average annual income for those in child care occupations was $16,060.[8] Among a group of states chosen as comparisons based on their early childhood education initiatives, Georgia's average wages for workers in the industry are substantially lower than those in the other states. In North Carolina, Illinois, Pennsylvania, and Minnesota, the average annual wages for general child care occupations in 2006 were (respectively): $18,120, $19,700, $18,500, and $19,020. For educational administrators the average annual wages for the same set of states were: $37,440, $48,190, $42,330, $41,590. According to

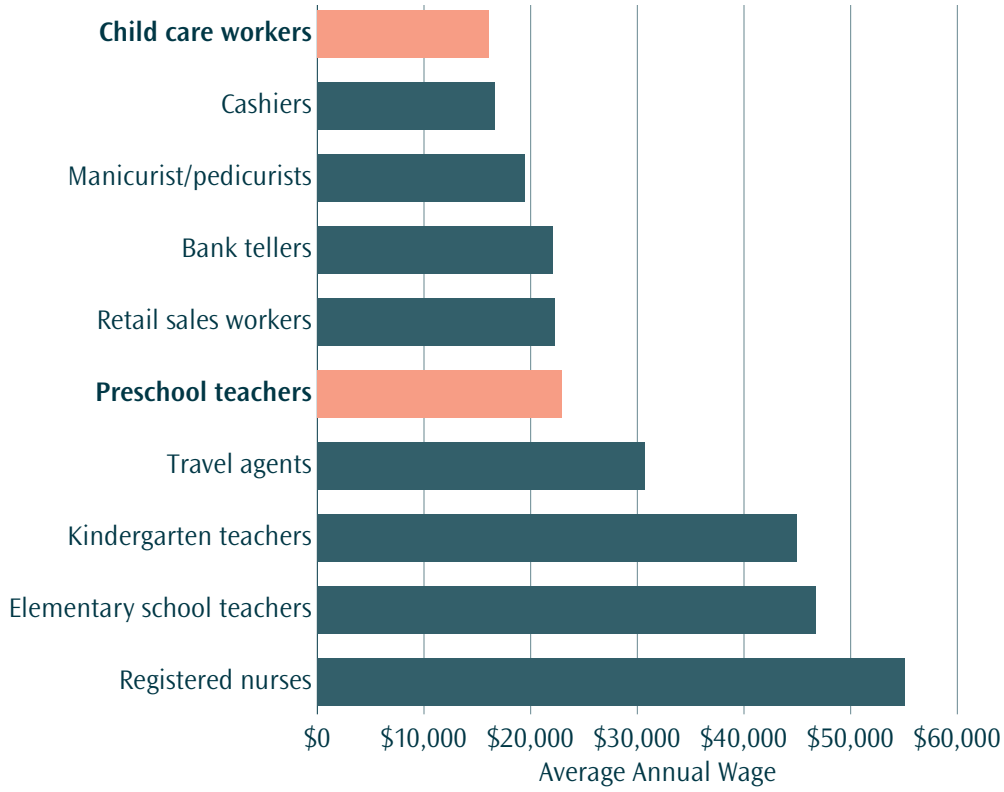
[7]The Economic Census surveys virtually all businesses in the U.S. and therefore provides a comprehensive source of data on economic activity in the U.S. The U.S. Census Bureau County Business Patterns produces an annual estimate of the size of industrial sectors. The U.S. Bureau of Labor Statistics (BLS) also provides employment data by industry and occupation but does not include all industries. In particular the BLS data do not include an annual estimate of the child care services industry by state. In all Census and BLS data, child care is covered under the North American Industry Classification System (NAICS) code number 624400, "Child Day Care Services."

[8]The BLS estimates are similar to those from Georgia's Early Care and Education Economic Impact Survey. In that survey, the annual wages for all workers in child care are estimated at $16,986. Estimates for all non-administrative workers are $14,860; and estimates for only lead teachers, teaching assistants, specialists, and paid assistant caregivers (not administrative, clerical, or other) are $15,101.

these figures, among these comparison states, the averages wages in the industry in North Carolina are closest to those in Georgia—and those wages are 12.8% higher for general child care occupations and 9.7% higher for administrators.

The data in Figure 2 provide comparisons of annual wages for non-managerial occupations in a number of areas including child care and preschool teachers. As this figure illustrates, child care workers receive about 20% less than manicurists and pedicurists; 30% less than retailers, preschool teachers, and bank tellers; half of the earnings of travel agents; and one-third or less of the wages earned by kindergarten and elementary school teachers, and registered nurses. Preschool teachers earn half that of kindergarten or elementary school teachers.

Figure 2. Average Annual Wages in Georgia by Occupation (2006)



Source: U.S. Bureau of Labor Statistics, May 2006.

Note. Child care workers explicitly exclude preschool teachers and assistant teachers and administrative staff.

Number of Children Served and Needs. The number of children served in Georgia's early care and education industry is yet another measure of the size of the sector. Data from Georgia's Early Care and Education Economic Impact Survey, administrative data provided by BftS for this report, and data from Georgia's Pre-K forecasting model (Tasic and Wallace, 2007) show that the industry provides care for an estimated 383,379 children.

While Georgia's early care and education industry has played an important role in meeting parents' and children's needs, the presence of waiting lists for quality care attests to a potential under-supply of care. One extreme view of the child care market is that the demand for child care is equal to the number of children at various ages. Although the population of children may not reflect the actual total demand for child care, it is an easily available proxy.[9] As reported in Table 2, the enrollment in care varies dramatically across the age of children, with 25.7% of all infants served. At the toddler

[9]Stay-at-home parents may not need regular care; informal care may be used; older children may have access to various programs or they may take care of themselves.

stage, 32.3% of the potential demand is served. The percentage of the preschool population served (including the Pre-K population) ranks highest at 81.3% of all 4-year-olds.[10] Once children hit school age (ages 5–13), the percentage of the total population served through before and/or after school care falls off significantly to 8.9%.[11]

It must be noted that these figures do not account for informal care and there are a number of after-school programs that are not included in the survey data.

Table 2. Total Child Care Enrollments and Total Population of Children by Age Group

Type of Care	Total Enrollments	Population	Percent of Population Served
Infants (birth–1)	72,712	282,403	25.7%
Toddlers (age 2–3)	90,593	280,473	32.3%
Preschool (including Pre-K) (age 4)	113,281	139,258	81.3%
School-aged (age 5–13)	106,793	1,196,898	8.9%

Sources: Capacity is based on reported enrollment from the Georgia's Early Care and Education Economic Impact Survey for non-Pre-K data. Georgia's Pre-K Program data from BftS. Other population figures from U.S. Census, American Community Survey 2006.

Note. Infants include children aged less than one year and one year, toddlers include children aged 2 and 3 years, preschoolers are children aged 4 years, and school-aged include children aged 5 to 13 years.

Comparing enrollments to the number of young children in homes with 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 U.S. Census show that the number of children under age 6 in working households in Georgia is 473,833 (2005). Compared to the estimated enrollment through age 5, this implies coverage for approximately 58% of children less than age 6 in working families (two-parent and single-parent households). Again, since the capacity does not include informal and other unreported care, this is an underestimate of coverage. It does represent, however, the coverage in licensed and/or regulated care available to Georgia's young children.

Number of Parents Served. The number of parents actually served by the early care and education industry in Georgia is difficult to estimate. In Georgia, the total wage and salary income of all working parents with children under the age of 6 is estimated to have been $32.7 billion in 2006 (research team estimates based on U.S. Census data).[12] Without the early care and education industry, a substantial portion of these wages would not be supported.

A somewhat more conservative estimate of those working parents who utilize child care services is the number who receives the federal child care credit. In 2005, the Internal Revenue Service reports that 223,848 Georgia filers took the child care tax credit. Of those, about 50% were married-joint filers. Assuming that both married parents benefit from child care, these data suggest that 335,772 parents utilized the child care credit in 2005. With median annual earnings in Georgia in 2005 of $40,646 (U.S. Census), this suggests that parents who utilized the credit earn an estimated $13.6 billion.

[10] While Georgia's Pre-K Program is a universal program, it is not mandatory, so not all eligible children are enrolled.

[11] Summer care is not included as children in summer care overlap with those in care during the school year, but it is impossible to estimate the extent of the overlap.

[12] Based on 2000 Census data extrapolated to 2006 levels.

Economic Impact of Georgia's Early Care and Education Industry – Gross Receipts

The economic impact of the early care and education industry in Georgia can be estimated a variety of ways. This study relies heavily on the documented "Cornell Methodology" (Ribeiro and Warner, 2004; Warner et al, 2004) to estimate the economic impact of the early care and education industry. As that methodology notes, the first critical piece of information for this analysis is an estimate of the size of the early care and education industry as an input into the calculation of the total economic impact of the industry. As discussed above, the size of the sector may be measured by:

- Number of establishments
- Number of employees
- Number of children served
- Number of parents served

In the workings of the economy, gross receipts represent monies that the early care and education industry receives, and in turn are the monies available by the industry to spend on employees, capital, transportation, and other goods and services.

While each of these is an important indicator of the industry in the entire state economy, there is a fifth measure of the size of the industry—gross receipts. It is the gross receipts estimate that is typically used to measure economic impact.[13] Gross receipts measure the total amount of resources that go into the early care and education industry. Studies done in other states have estimated relatively conservative estimates of gross receipts. Monies spent on child care, either directly through parent payments, or indirectly through state and federal subsidies in the form of child care tuition subsidies or training subsidies, should be included in the estimate of "gross receipts."

In the workings of the economy, gross receipts represent monies that the early care and education industry receives, and in turn are the monies available by the industry to spend on employees, capital, transportation, and other goods and services. To estimate the impact of the early care and education industry on the economy, one may use either gross receipts as a measure of economic activity or total expenditures. Gross receipts in large part are translated into expenditures, so the two are nearly equivalent. Detailed data on expenditures are difficult to obtain, even with the survey created for this report. In that survey, 77% of family child care home survey respondents and 61% of center-based survey respondents did not answer the survey question about operating costs, where only 41% and 34% of family and center providers did not answer the question about revenues. This may be because revenues are reported for income tax purposes and thus the respondent burden is lower. It may also be that respondents consider questions about expenditures, like rent or mortgage payments, to be more sensitive in nature. Most other state studies of the economic impact of the early care and education industry use gross receipts. Gross receipts are therefore used as the basis of economic activity for purposes of measuring economic impact in this analysis for Georgia as well.

Gross receipts is the sum of parent fees, federal, state and local government payments to providers and payments in the form of specific programs, and other contributions from companies, philanthropists, and other entities:

Box 1: Gross Receipts =

Parent fees +
Federal, State, and Local Government direct payments to providers +
Government funded programs +
Other Contributions

[13]Gross receipts is the standard statistic used to measure economic impact in studies for New York, Massachusetts, Kansas, Minnesota, North Carolina, and Ohio, among others.

In this analysis, it is important not to double-count the funds going into the child care sector. For example, an employer may give an employee a voucher to subsidize child care. If the parent pays $75 per week in child care out of their own pocket and $75 in the form of a voucher, the total receipt is $150 per week. It is important not to count the parent "payment" of $150 and then also add the corporate subsidy of $75. A total of $150 only should be included in the gross receipts estimate in this simple example.

Grants from state and federal authorities that are aimed at raising the quality of care, such as training programs for teachers and substitutes, meal programs, etc. that parents do not pay for in the form of higher tuition, should be included in the gross receipts of the industry. Similarly, grants from state and federal authorities that subsidize (fully or in part) the cost of care should be included in gross receipts (as long as the subsidy is not double counted in the parent payment).

Contributions from corporations in the form of rent or other goods and services free up resources for the early care and education industry to spend in other places, including increased salaries. These contributions therefore have an impact on the economy as well. Unfortunately, it is very difficult to obtain an estimate of the value of these types of contributions. Therefore, the economic impact analysis presented below is a conservative view of the total value of the early care and education industry in Georgia because it does not include in-kind contributions from corporations.

Box 2: Example of Calculation of Parent Fees in New York and Kansas Studies

APC = weekly charges (by age group and type of care) × number of weeks in care

- Children are in care 52 weeks a year (except school-age child care)
- School-age child care was assumed for 40 weeks
- Summer care was assumed for 12 weeks

Source: Ribeiro and Warner, 2004.

Parent Fees. In many studies, parent fees are the largest component of gross receipts. These fees are generally calculated as follows:

Total enrollment × the average price of care (APC) by type of care and age of child

Average price data typically come from state market rate surveys or Child Care Resource and Referral Agency data. For example, the information in Box 2 presents the calculation for New York and Kansas (Ribeiro and Warner, 2004).

In this study, estimates of enrollment and parent fees are based on results from Georgia's Early Care and Education Economic Impact Survey. The survey results provide data that can be used to derive an estimate of average enrollment and fees for most ages of care. Those data are supplemented with the data from the 2007 Georgia Market Rate Survey to review the consistency of the survey results. In all cases, the Georgia's Early Care and Education Economic Impact Survey results for parent fees are very similar to those found in the Georgia Market Rate Survey.

The data in Table 3 provide the estimates of average parent fees by age group for centers and family child care homes. The estimates are broken down by zone, as defined in the Georgia Market Rate Survey.[14] For infants, toddlers, and preschool groups, the assumed number of weeks in care is 48 (lower than the assumed number used in studies for some states, including New York and Kansas). Pre-K and school-aged care is assumed to be

[14]Zone 1 includes large urban and suburban areas, Zone 2 is smaller urban and suburban areas, and Zone 3 is rural areas.

Table 3. Estimation of Parent Fees for Child Care in Georgia

	Zone	Age	Number of Centers	Average Enrollment	Average Weekly Cost	Weeks	Total Fees
Centers	1	Infants	1,473	22	$149	48	$233,783,942
	1	Toddlers	1,589	24	$134	48	$250,610,607
	1	Preschool	835	16	$120	48	$78,775,387
	1	Pre-K	910	23	$120	36	$89,521,642
	1	School-aged	1,661	35	$85	36	$178,487,135
	1	Summer	662	35	$127	14	$41,458,786
	2	Infants	1,064	17	$100	48	$85,314,124
	2	Toddlers	1,277	19	$93	48	$109,108,315
	2	Preschool	829	14	$84	48	$46,924,468
	2	Pre-K	661	26	$88	36	$53,803,432
	2	School-aged	1,061	22	$70	36	$58,523,064
	2	Summer	465	22	$89	14	$12,646,340
	3	Infants	599	14	$80	48	$31,354,764
	3	Toddlers	724	18	$77	48	$47,435,030
	3	Preschool	561	13	$74	48	$24,890,395
	3	Pre-K	297	38	$80	36	$32,352,227
	3	School-aged	684	23	$59	36	$34,059,600
	3	Summer	264	23	$76	14	$6,545,003
Center Total							$1,415,594,263

provided for 36 weeks, which is based on the typical Georgia Public School system calendar, and 14 weeks are allocated to summer programs. The estimates of the number of centers and average current capacity are taken from results of Georgia's Early Care and Education Economic Impact Survey for all groups except the summer programs.[15] Average weekly cost is estimated based on the survey response to the question "Please write the number of children that fall into each age group and the weekly base rate per child for that group." Finally, total fees are calculated as:

$$\textit{Number of Providers} \times \textit{Average Enrollment Per Provider} \times \textit{Average Weekly Cost} \times \textit{Weeks}$$

Based on this calculation, the total level of parent fees in child care in Georgia was $1.6 billion in a 12-month period over 2006-07.[16]

[15]Administrative data on the number of centers and licensed capacity by age group are not available. The enrollment estimate is based on the survey response to the question "Please write the number of children that fall into each age group and the weekly base rate per child for that group." This differs from the licensed capacity. For the "summer" category, data on the number of centers/family child care homes and average weekly costs are taken from the 2007 Georgia Market Rate Survey. Enrollment for the summer category is assumed to be equal to the school-aged enrollment.

[16]Parent fees were generated based on the reported weekly base rate charged to parents. The survey asked separately for DFCS subsidies and other revenues. In calculating parent fees in Table 3, we assume that subsidies are not included. If subsidies are in fact reported as part of the parent fees response, the total economic impact would be overstated by approximately 8 percent.

Table 3. Estimation of Parent Fees for Child Care in Georgia (continued)

	Zone	Age	Number of Homes	Average Enrollment	Average Weekly Cost	Weeks	Total Fees
Families	1	Infants	2,792	3	$113	48	$38,936,767
	1	Toddlers	2,772	3	$109	48	$37,955,834
	1	Preschool	1,667	2	$102	48	$13,383,496
	1	School-aged	2,067	2	$75	36	$12,548,926
	1	Summer	895	2	$92	14	$2,584,834
	2	Infants	1,517	3	$80	48	$17,555,537
	2	Toddlers	1,575	3	$81	48	$17,928,782
	2	Preschool	1,134	2	$78	48	$6,875,039
	2	School-aged	1,172	2	$59	36	$5,538,839
	2	Summer	500	2	$76	14	$1,191,404
	3	Infants	901	3	$66	48	$7,258,911
	3	Toddlers	913	3	$71	48	$8,422,052
	3	Preschool	704	2	$67	48	$3,536,892
	3	School-aged	782	2	$56	36	$3,899,538
	3	Summer	326	2	$68	14	$768,065
	Family Total						$178,384,915
	Total Parent Fees						$1,593,979,178

Source: Calculations based on Georgia's Early Care and Education Economic Impact Survey and 2007 Georgia Market Rate Survey.

Note. Infants include children aged less than one year and one year, toddlers include children aged 2 and 3 years, preschoolers are children aged 4 years who are not in Georgia's Pre-K Program, Pre-K are children aged 4 years who are in a private Pre-K program that charges fees (almost none of the public Georgia's Pre-K Programs listed any parent fees on their surveys so they are not included in this table), school-aged and summer include children aged 5 to 13 years. The average weekly costs are estimated from Georgia's Early Care and Education Economic Impact Survey for all categories except the summer rates which are taken from the Georgia Market Rate Survey.

Federal and State Funds. There are a variety of federal and state funds that are part of the total gross receipts of the early care and education industry. Table 4 reports these components of gross receipts of the early care and education industry in Georgia for a 12-month period for fiscal year 2006 or 2007, depending on the available source. The federal government provides funds through its Child Care and Development Fund (CCDF), administered in Georgia by the Department of Human Resources (DHR) and BftS. For 2006, those funds are estimated at $15.7 million.

The Georgia Department of Human Resources administers federal Temporary Assistance for Needy Families (TANF) funds, allocated to a variety of early care and education programs, including after-school care. DHR estimates that $14.0 million in TANF funds were allocated to different programs related to child care in 2006 (DHR, 2007).

Head Start and Early Head Start are administered by the federal government through the Administration for Children and Families, Department of Health and Human Services. Reported expenditures in Georgia in 2007 were $169.2 million (DHHS, 2008).

Table 4. Estimated Federal and State Funds for the Early Care and Education Industry in Georgia

Federal Child Care and Development Fund (CCDF)	$15,726,695
TANF – Direct (used for grants to school-aged care/youth programs)	$14,000,000
Head Start/Early Head Start	$169,203,527
Georgia's Pre-K Program	$309,598,387
Child and Adult Care Food Program	$82,724,334
Summer Food Service Program	$9,926,794
DFCS subsidies (CCDF devoted to DFCS subsidies)	$183,157,419
TOTAL	$784,337,156

Sources: BftS, DHR, U.S. Department of Health and Human Services, Administration for Families and Children

All receipts are for a 12-month fiscal year, covering part of calendar year 2005 and part of calendar year 2006 or part of calendar year 2006 (Summer Food Service and Child and Adult Care Food Program, TANF, and Federal Child Care and Development Fund) and part of calendar year 2007 (Pre-K, United Way, DFCS, and Head Start/Early Head Start).

Table 5. Estimated Gross Receipts for the Early Care and Education Industry in Georgia

Parent fees	$1,593,979,178
Federal & state funds	$784,337,156
Other Contributions	$12,538,040
TOTAL GROSS RECEIPTS	**$2,390,854,374**

Sources: United Way of Atlanta and Philanthropic Collaborative data base; BftS, DHR, U.S. Department of Health and Human Services, Administration for Families and Children; estimates based on Georgia's Early Care and Education Economic Impact Survey data

In addition to the federal Child Care and Development Fund, BftS administers other programs as well. First, BftS administers the universal, voluntary pre-kindergarten program for 4-year-olds (Georgia's Pre-K Program). This program is state-funded through the Georgia Lottery for Education, and BftS reports that 2006-07 expenditures were $309.6 million. Second, BftS also administers two nutrition programs: the Child and Adult Care Food Program (CACFP), and the Summer Food Service Program (SFSP). The CACFP is designed to reimburse providers for nutritious meals served to children or adults in a child care environment, while the SFSP provides nutritious meals to children from needy areas during periods when schools are closed for vacation. In 2006, these public funds amounted to $92.7 million (data derived from information provided by BftS).

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 non-profit sector. It has proven very difficult to estimate the value of contributions, and as a result, the total amount is underreported.

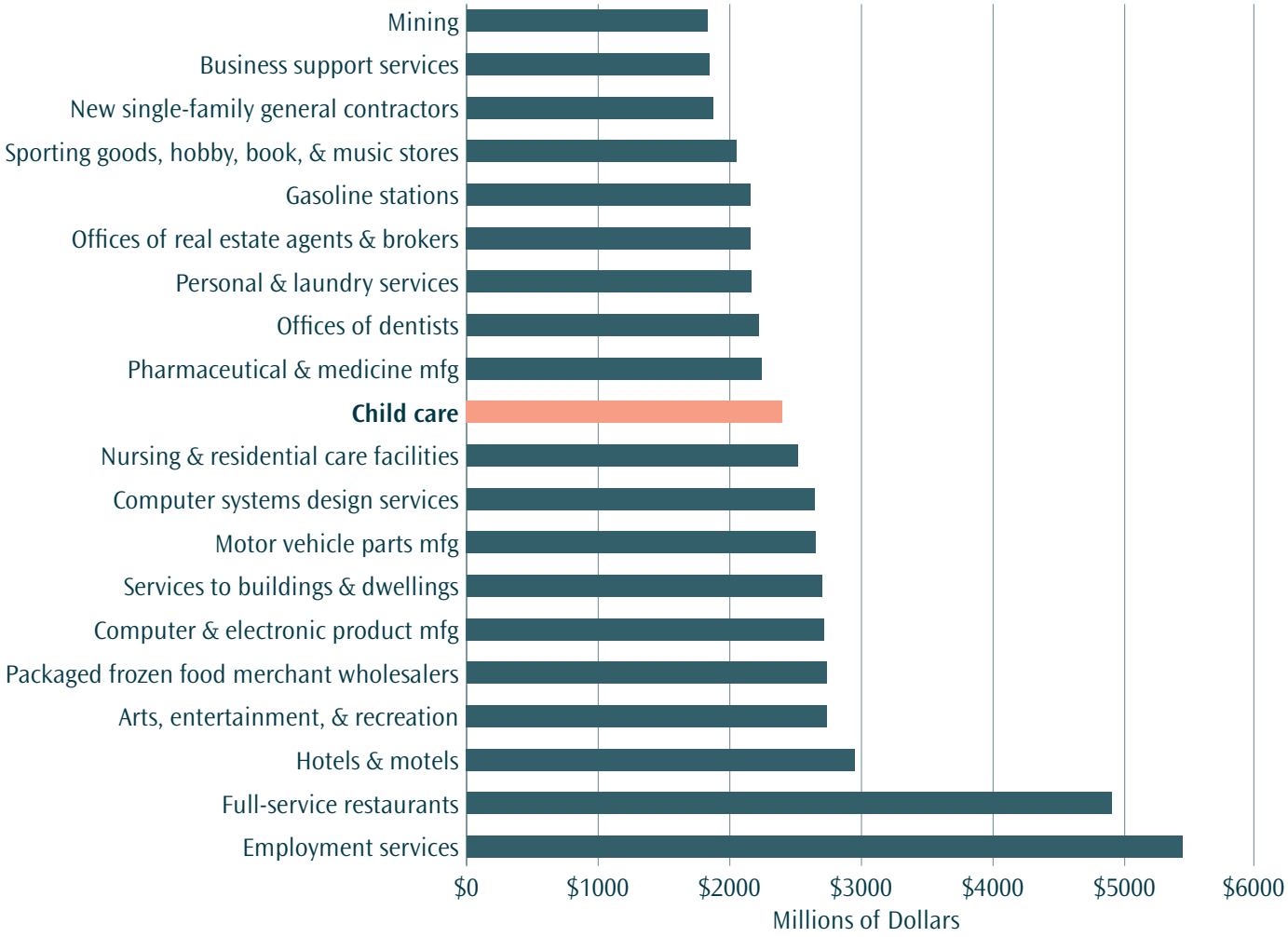
One source of contributions is from businesses in terms of their support of child care for their employees. Such support may come through subsidies for child care or the direct provision of child care. Quantifying this support has not been possible, so it is not included in this analysis. Businesses also provide subsidies to the industry by providing space rent-free or at reduced rates, or by subsidizing other operating expenses such as utilities or training. Estimates of these contributions are not available.

Estimates of contributions handled by the United Way (statewide) are available. Based on detailed data provided by the United Way, the estimate of United Way administered contributions to the child care sector in Georgia is $11.0 million.[17] These contributions support programs including training for teachers, substitute teachers, and staff for "Early Reading First." Finally, an estimate of other monetary contributions to not-for-profit child care centers is made using data from Georgia's Philanthropic Collaborative. The Collaborative collects information about grants to not-for-profit child care centers, which it estimates at $1.6 million for 2006 (Foundation Center, 2007).

Total Gross Receipts. Annual total gross receipts for the early care and education industry in Georgia are estimated at $2.4 billion. As shown in Table 5, parent fees make up the largest share, totaling $1.6 billion, followed by federal and state funds ($784 million), and charitable contributions (almost $13 million). The level

[17]The data provided by United Way cover a 12-month period 2006-07.

Figure 3. Gross Receipts by Industry in Georgia



Source: Census Bureau, 2002 Economic Census, adjusted to 2006

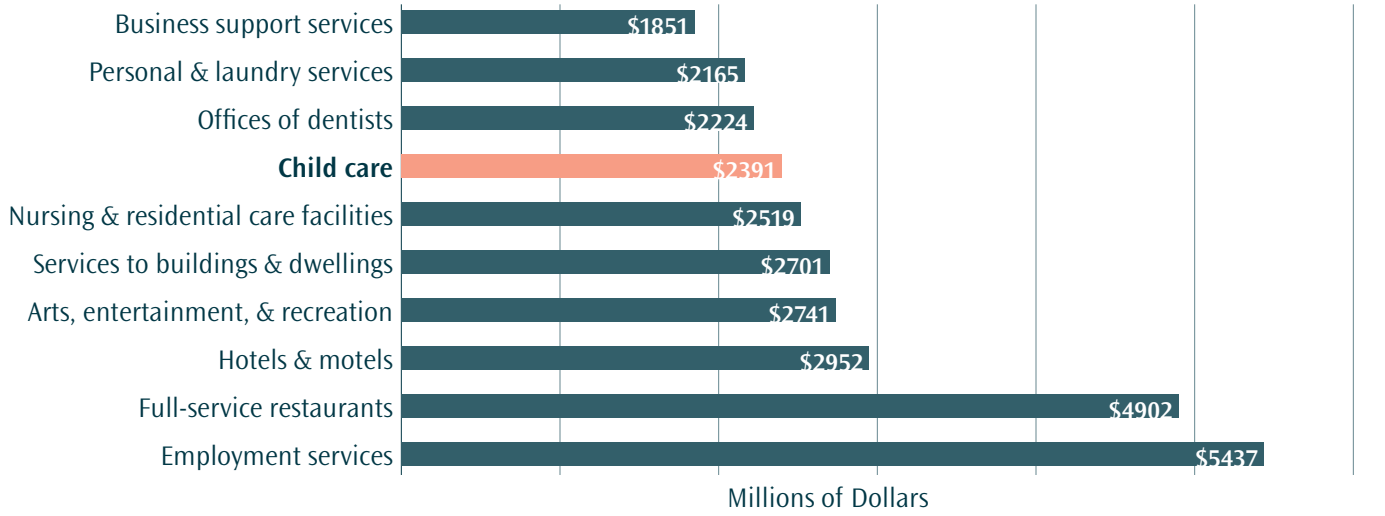
Note. The early care and education industry number uses the adjusted gross receipts calculated in this report rather than the Census Bureau's number. All other numbers in this table come from Census Bureau data.

of gross receipts for the industry in Georgia is not dissimilar to the findings in other states.[18] Studies for Illinois (2005), New Jersey (2006), Ohio (2004), North Carolina (2004), Minnesota (2003), and Massachusetts (2004) report gross receipts of (in billions of dollars, respectively): 2.12, 2.55, 1.95, 1.5, 0.96, and 1.5.

Comparisons with Other Industries. Comparison with other industries is made difficult by the unavailability of comparable gross receipts data. For example, the Economic Census reports gross receipts for all industries; however, in the 2002 Economic Census, gross receipts for "Child Day Care" totaled $870,307,000, which is less than half the amount calculated in this report (U.S. Census, 2002). Differences in these figures can be attributed to the timing of the data collection and to the comprehensiveness of the census data. Although the data from the census are adjusted to reflect current values, there might have been changes in the composition of the economy. The Census data also do not account for receipts of some self-employed child care businesses and charitable and

[18]The study in Illinois can be found at http://www.chicagometropolis2020.org/documents/FullEISStudy.pdf. The studies for NJ, OH, NC, MN, and MA are all available through the National Economic Development and Law Center, http://www.nedlc.org.

Figure 4. Gross Receipts ($ Millions) by Industry, "Fast Growing Industries in Georgia"



Source: Census Bureau, 2002 Economic Census, adjusted to 2006

Note. The early care and education industry number uses the adjusted gross receipts calculated in this report rather than the Census Bureau's number. All other numbers in this table come from Census Bureau data. Georgia Area Workforce Trends (Georgia Department of Labor, 2007) identifies these industries as "fast growing."

in-kind contributions to the early care and education industry as explained above. Additionally, the Census data exclude federal, state, and local funding.

The data in Figure 3 compare reported gross receipts for various industries in Georgia using the adjusted gross receipts amount for the early care and education industry.[19]

Examining the gross receipts for various industries, gross receipts for the child care industry (adjusted) are similar to industries across different sectors, such as nursing and residential care facilities; hotels and motels; pharmaceutical and medicine manufacturing; and the arts, entertainment, and recreation industries; among others.

The Georgia Department of Labor produces an analysis of trends in occupations and industries in Georgia (Georgia Department of Labor, 2007). Trends through 2011 suggest that fast-growing industries include child care, arts and recreation, nursing care, and others. These growing industries are reported in Figure 4, with their estimates of gross receipts. As seen in this figure, the size of the early care and education industry (in terms of adjusted gross receipts) is on par with all of the fast growing industries except for restaurants, and employment services.

Total Economic Impact. To be conservative, most states have used only the gross receipts of the early care and education industry to represent its economic impact. However, the industry's economic activity fuels expansion in other sectors of the economy such as the food industry, transportation industry, and manufacturing industry (among many others). In turn, these expenditures have "multiplier" or "ripple" effects throughout the economy. Thus, a more accurate representation of the total economic impact of the early care and education industry, albeit a less conservative estimate, includes the *direct effect* (gross receipts of the industry) as well as the *indirect effects* (increased demand for goods and services by the early care and education industry) and

[19]Census may or may not underestimate the gross receipts of other industries as well. Data are not available to analyze whether or not reported gross receipts for other industries should be adjusted.

Table 6. Total Economic Impact of the Early Care and Education Industry in Georgia

	Direct Effect ($ Millions)	Indirect Effect ($ Millions)	Induced Effect ($ Millions)	TOTAL IMPACT ($ Millions)	Employment Multiplier
Estimate	$2,391	$763	$914	$4,069	1.21

Source: Estimates based on gross receipts and IMPLAN model

induced effects (changes in spending that result from changes in the income of employees in the early care and education industry and those industries that supply goods and services to the early care and education industry).[20] For this reason, this report includes an estimate of the indirect and induced effects of the industry in Georgia.

This estimation is conducted using the IMPLAN economic impact model, an industry-standard model used for regional economic impact analysis. The model is based on 2006 level data, which is consistent with the overall analysis of this report. Its data sources include the Bureau of Labor Statistics, Bureau of Economic Analysis, and the U.S. Census Bureau. The IMPLAN modeling software includes data on 528 sectors of the economy including child care. This model estimates that the economic activity of the early care and education industry in Georgia generates an additional $1.7 billion of economic activity in the state. That means that for every $1.00 of gross receipts in the industry, an additional $0.70 is generated in the form of indirect and induced impacts. For every 100 jobs in the early care and education industry, an additional 21 jobs are developed throughout the economy with an average annual wage of $17,000.[21] Thus, the total contribution of the industry to Georgia's economy in 2006 is $4.1 billion (Table 6). The total impact of the direct, indirect, and induced effects also adds over $117 million in total tax revenues (federal, state, and local). For every $100 spent in the industry by the federal or state government, an additional $70 is generated in the economy. The total economic impact of the federal and state spending in the industry alone is $1.3 billion.

Compared to other states, the economic impact of the industry is Georgia is similar in magnitude. Studies for Illinois (2005), New Jersey (2006), Ohio (2004), North Carolina (2004), Minnesota (2003), and Massachusetts (2004) report total economic impacts of (in billions of dollars, respectively): 4.16, 4.53, 3.43, 2.64, 2.03, and 2.71.[22]

Summary of the Short-Term Economic Impact of the Early Care and Education Industry in Georgia

This chapter examined the short-term economic impact of the early care and education industry in Georgia. The industry serves an estimated 383,379 children each year and employs 61,203 individuals directly while generating an additional 12,900 jobs as a result of its economic activity in the state. In terms of gross receipts, the industry generates $2.4 billion each year. These include parent fees, federal and state funding, and donations. The size of the sector in terms of economic activity put it on par with industries such as computer and electronic product manufacturing; motor vehicle parts manufacturing; the arts, entertainment, and recreation industries; and pharmaceutical manufacturing. The total economic impact of the early care and education industry in Georgia is estimated to be approximately $4.1 billion annually, not including additional long-term benefits discussed in the next chapter of this report.

[20]Studies treat these types of receipts differently. For example, in the case of the Louisiana Study (Nagle and Terrell, 2005), funds used to support the Child and Adult Food Care Program and various training activities were included in gross receipts, but administrative funds for the Child Care and Development Block Grant were not included in gross receipts (page 15).

[21]The employment multiplier is 1.21, which means that for every job in the early care and education industry, an additional 0.21 jobs are created in the economy.

[22]The study in Illinois can be found at http://www.chicagometropolis2020.org/documents/FullEISStudy.pdf. The studies for NJ, OH, NC, MN, and MA are all available through the National Economic Development and Law Center, http://www.nedlc.org.

Chapter 3 – Economic Impact of the Early Care and Education Industry Through Parents and Children

The previous chapter of this report provided an economic model for estimating the short-term economic impact of the early care and education industry in Georgia. Not included in that estimate are the potentially large economic impacts of child care through its effects on parents and the long-term outcomes of children. This chapter focuses on the nexus of child care and economic development by reviewing the current research on these short- and long-term impacts. As a whole, parents are responsive to the price of child care. Programs aimed at reducing parents' cost of care increase the use of child care and increase parental labor force participation. Early childhood education programs have a number of positive impacts on parents:

- reduced worker absenteeism and job turnover,
- increased satisfaction with work,

and children:

- increased educational attainment,
- reduced incarcerations and teen pregnancy.

Specifically, this chapter examines, through prior literature, how the cost of child care and child care subsidies affect parental child care choices and how child care choices affect turnover, absenteeism, and job satisfaction for working parents. The chapter continues by focusing on prior literature that shows the long-term benefits of quality child care on children. This includes a discussion of several longitudinal studies, some of which span decades, which show the positive outcomes for low-income children who participated in specific, quality child care programs. The outcomes discussed include better high school performance, a higher rate of college enrollment, higher future earnings, and increased cognitive development. Literature on the long-term benefits of after-school programs is also examined. Outcomes discussed include gains in math scores, school attendance rates, and reduced grade repetition by participants. Literature also indicates that after-school programs can lead to a reduction in juvenile crime rates and victimizations.

Impact on Parents

Cost of Child Care and Employment. There is a large body of literature demonstrating that child care, particularly the cost of child care, is an important determinant of the employment behavior of mothers. Findings from this literature consistently indicate that a higher price for child care is associated with a lower probability that a mother will work (Hill, Waldfogel, Brooks-Gunn, and Han, 2005; Tekin, 2007a; Han and Waldfogel, 2001; Anderson and Levine, 1999). Most studies find that a 10% increase in the price of child care would lower the probability that a mother of a young child would work by about 3 to 4 percentage points. In addition, research on child care subsidies indicate that receiving a child care subsidy increases the probability of employment substantially (Blau and Tekin, 2007; Matthews, 2006; Meyers, Heintze, and Wolf, 2002; Brooks, 2002).

Many studies focus on low-income, single mothers because the cost of child care is particularly burdensome for these mothers. One study finds that 65% of poor, single, working mothers who paid for child care in 2001 paid at least 40% of their income for child care (Wertheimer, 2003). A study of welfare recipients found that subsidy receipt was associated with a 50% increase in months worked and an over 100% increase in earnings (Danziger,

Ananat, and Browning, 2004). Former welfare recipients with young children are 82% more likely to be employed after two years if they receive help paying for child care (Danziger et al., 2004). More generally, Matthews (2006) finds that a child care subsidy covering 100% of child care costs could increase the proportion of poor mothers who work by 14 to 15%.

Interestingly, Tekin (2007a) finds that child care subsidies are usually a more cost-effective way of raising the labor supply of mothers than wage subsidies, because a wage subsidy provides benefits to all working mothers while a child care subsidy provides benefits only to those working mothers who use paid child care.

Worker absences associated with child care breakdowns were estimated to cost U.S. businesses about $3 billion in 1998 (Child Care Action Campaign, 1998).

Turnover, Absenteeism, and Satisfaction. While cost of child care is a critical determinant of employment, availability is also important. Snyder, Banghart, and Adams (2006) found that mothers without access to a convenient, local child care center were about twice as likely to leave their jobs as those who did have access. A National Child Care Information Center report points to a 1992 survey that indicated that nearly 30% of workers knew employees who quit their jobs because of inadequate child care (Matthews, 2006). According to the same report, high percentages of workers also experienced lower productivity and higher rates of absenteeism and tardiness because of child care problems.

A survey of employees across various industries revealed that 45% of parents miss one or more days of work every six months due to a child care breakdown, and 65% are late to work or leave work early due to child care issues (Bright Horizons Family Solutions, 2002). Worker absences associated with child care breakdowns were estimated to cost U.S. businesses about $3 billion in 1998 (Child Care Action Campaign, 1998). A rough estimate of Georgia's share is 2.9% or $103 million (1998); this translates into $120 million in 2007 levels.

Consistent with this, Press, Fagan, and Laughlin (2003) found that child care subsidies reduced the incidence of hours/schedule-related problems at work by 56%. Similarly, a survey conducted in Minnesota in 2004 revealed that 20% of parents reported child care problems that interfered with getting or keeping a job within the prior year, and a significant percentage of parents reported having lost work time or income due to a problem related to child care (Minnesota Department of Human Services, 2005). On the other hand, there is evidence that child care subsidies play an important role in inducing mothers to switch from jobs with non-standard work schedules to those with standard schedules, especially for mothers who are on welfare (Tekin, 2007b). This finding has important implications for the well-being of single mothers. Non-standard work is linked to a number of adverse outcomes, such as work and family conflicts, marital instability, health problems for both parents and children, and poor educational outcomes for children (Heymann, 2000).

Long-Term Impacts on Children

Early Care Programs. Although parents need child care facilities to supervise their children while they financially support their families by working, child care provides children with much more than supervision. There is a large body of literature documenting the long-term benefits of high-quality early care and after-school programs on children's development, school readiness, health, and on their outcomes as adults (e.g., NICHD Early Child Care Research Network and Duncan, 2003; Gormley, Gayer, Phillips, and Dawson, 2005; Nores, Belfield, Carnett, and Schweinhart, 2005; Pungello, Campbell, and Barnett, 2006; McLaughlin, Campbell, Pungello, and Skinner, 2007; McCartney, Dearing, Taylor, and Bub, 2007; Belsky, et al., 2007).

Recent research on the longitudinal effects of a child-parent program in Chicago suggests a number of benefits from early childhood education and its contributions to providing a firm foundation for young children and their families (Reynolds, Chang, and Temple, 1998; Reynolds and Temple, 1998, Reynolds, Temple, Robertson, and Mann, 2002). The Chicago Child-Parent Pre-School Center and Expansion Program, which began in 1967 and is still operating, provides a comprehensive set of educational and family support services from preschool through the transition to early elementary school. The premise of the intervention is that school success is founded on a stable and enriched learning environment where parents are active in their child's education. Academically, children who had 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. Children who had been enrolled in the program were also less likely to have been involved with the juvenile justice system (Reynolds, Ou, and Topitzes, 2004). A cost-benefit analysis indicated that for every dollar spent on the program, there was a $7.14 return to society in reduced costs for education and juvenile justice. The greatest economic benefits were found for children who participated for a greater number of years in the program.

… Lamb (1998) concluded that high-quality, center-based child care could have positive effects on the intellectual development of children, independent of family background.

Some of the most credible evidence on the effects of an intervention for infants and toddlers in child care on child outcomes comes from the Carolina Abecedarian Project—one of the most intensive early childhood programs offered for children from families with limited economic means.[23] Between 1972 and 1977, the program randomly enrolled infants from low socio-economic backgrounds into either an early education intervention program or in an untreated control group. Those in the treatment group received full-day, year-round, center-based educational child care from infancy through age five. The randomized nature of this intervention makes the findings drawn from it more credible as they can be interpreted as causal effects rather than just correlations.[24]

There are a large number of studies comparing both the children's and parents' outcomes between the treatment and control groups. These studies consistently indicate that those who received the treatment performed better at high school and had a higher rate of college enrollment. The participants were also more likely to have a skilled job, were less likely to smoke and use marijuana, and were less likely to have their first child before age 18 (Pungello, Campbell, and Barnett, 2006; Campbell, Ramey, Pungello, Sparling, and Miller-Johnson, 2002). From this project, there is also evidence to support the protective and buffering role that early child care plays on depressive symptoms among young adults (McLaughlin, Campbell, Pungello, and Skinner, 2007). Specifically, the findings indicated that young adults (21 years of age) who had received full-time, early educational child care from infancy to age five reported fewer symptoms of depression than similar young adults who had not.

A third intensive early childhood program offered for children from poor families was the High/Scope Perry Preschool Program. Conducted in Michigan during the 1960s, this program was a daily center-based program that also consisted of weekly home visits by teachers and parent group meetings. The intervention was delivered to 1-, 2-, 3- and 4-year-old children for three consecutive years. The short-term effects saw higher reading and math scores through high school related to program participation. These higher cognitive outcomes led to a multitude of longer term outcomes. By the age of 40, Perry Preschool students were more likely to have graduated high school and have higher earnings than non-participants. Moreover, Perry Preschool students

[23]The Abecedarian Project, initiated in 1972, provided educational child care and high-quality preschool from birth–5 to children from very economically disadvantaged backgrounds (most raised by single mothers with less than a high school education, reporting no earned income, 98% of whom were African-American). The child care and preschool were provided on a full-day, year-round basis; had a low teacher-child ratio (ranging from 1:3 for infants to 1:6 for 5-year-olds); and used a systematic curriculum of "educational games" emphasizing language development and cognitive skills. The average annual cost of the intervention was about $13,900 per child (in 2002 dollars). (http://www.fpg.unc.edu/~abc/#intervention).

[24]See http://www.fpg.unc.edu/~abc/#home.

were more likely to own a home and a car, maintain a savings account, and be financially independent from other family members or state support. As a result, these students had higher tax contributions associated with their increased earnings, lower criminal activity, and decreased reliance on the state-sponsored welfare system (Nores, Belfield, Carnett, and Schweinhart, 2005).

The benefits of these intensive programs are likely to be more striking than those of the average child care program. However, many studies of other, quality early child care programs indicate that benefits do exist in less intensive programs, especially for children from low-income families. Hayes, Palmer, and Zaslow (1990) concluded that:

> *"In the area of cognitive development, there is no evidence that child care participation has negative effects among middle-class children. Furthermore, high-quality cognitive enrichment child care programs have positive implications for intellectual development among low-income children at risk for declining IQ scores." (pp. 64-5)*

In contrast, Lamb (1998) concluded that high-quality, center-based child care could have positive effects on the intellectual development of children, independent of family background.

After-School Programs. After-school care for school-age children is an important segment of this industry with a wide range of benefits. Several studies have found that participation in elementary and middle school after-school programs resulted in gains in math scores, school attendance rates, and reduced grade repetition (Delisio, 2005; Welsh et al., 2002). One study found that after-school programs generated a savings of $11 million for the school year for the state of California as a result of a decrease in the number of students repeating grades.

In addition to these academic benefits, an important economic benefit of children's participation in after-school programs is a reduction in juvenile crime rates and victimizations. This reduction is primarily attributed to the fact that juvenile crime rates peak between the hours of 2:00 p.m. and 8:00 p.m., the time during which after-school activities take place (Fox and Newman, 1997). Welsh and Hoshi (2002) identified high-quality after-school programs with an evaluated impact on delinquency. The identified programs were shown to have lower rates of drug activity for program participants compared with controls.

Another benefit derived from participation in after-school care is a reduction in the occurrence of risky behaviors by youth, most notably teen pregnancy and drug, alcohol, and/or tobacco use. As with observed reductions in crime rates, this reduction is attributed to the presence of adult supervision and the availability of alternative activities. Levine and Zimmerman (2003) found evidence of a reduction in teen pregnancy rates of 41% and 42% for the treatment groups in the Teen Outreach Program and Quantum Opportunities Program, respectively. Levine (2003) concludes that if after-school programs could cause a reduction in teen fertility of 40%, this would provide a social benefit of up to $3.2 billion per year, mostly from reduced welfare expenditures and increased tax revenue from higher employment rates.

Another benefit derived from participation in after-school care is a reduction in the occurrence of risky behaviors by youth, most notably teen pregnancy and drug, alcohol, and/or tobacco use.

Unfortunately, there are many children who go without after-school care, which may have detrimental consequences for these children and for society as well. According to the National Youth Violence Prevention Center (DOE, 2000), at least 8 million children are left alone and unsupervised after the end of the school day.

Summary of the Economic Impact of the Early Care and Education Industry on Parents and Children

While difficult to quantify, particularly in a report designed to calculate annual economic impact, it is important to keep in mind the significant, long-term benefits that the early care and education industry provides to both children and parents. Numerous studies have shown that parents are responsive to the price of child care. When programs are enacted that reduce parents' cost of child care, their participation in the labor force increases along with their utilization of child care providers. Studies have also shown that early childhood education programs can have a positive impact on the labor force through reduced worker absenteeism, lower job turnover, and increased job satisfaction, particularly among women.

Early care and education also offer positive, long-term benefits for children. A number of longitudinal studies show positive outcomes for low-income children who participated in specific, quality programs. These outcomes include better high school performance, a higher rate of college enrollment, higher future earnings, and increased cognitive development. After-school programs have also been shown to provide positive long-term outcomes, including gains in math scores, higher school attendance rates, and reduced grade repetition by participants. Literature also indicates that after-school programs can lead to a reduction in juvenile crime rates and victimizations.

It is important to note that most of the studies discussed in this chapter that have shown positive, long-term benefits for children have centered on specific, quality child care programs. In the next chapter, a discussion of the cost and economic impact of quality in child care is provided.

Chapter 4 – Quality and the Economic Impact of the Early Care and Education Industry

Chapter 2 of this report estimated the short-term economic impact of the industry in Georgia. Chapter 3 discussed the short- and long-term benefits of quality child care to both children and parents. In this chapter, an examination of both the short- and long-term economic impacts of quality in child care is presented. The issue of quality in the early care and education industry has the following costs and benefits:

- In the short run, quality programs have a direct impact on the economy because they have higher staffing ratios and expenditures per child.
- Quality programs offer long-term benefits that accrue through the children they serve through increased skills and productivity within our future workforce.
- Increasing quality in child care is not free. Therefore it is reasonable that without support within the public sector, quality increases could reduce access to child care for some parents due to increased costs of care.
- Increasing the average parent fees in the state to the average fees charged by programs with state and national quality distinctions raises the gross receipts of the industry by $180 million and generates $126 million in additional economic activity in the state.

The research on quality child care highlights the educational, fiscal, and societal gains of a quality early care system.

This chapter first presents relevant research on the impact of quality in this industry on these long-term benefits and then presents some analyses quantifying the short-term economic impact of quality through higher provider expenditures.

Long-Term Benefits of Quality Child Care on Children

The research on quality child care highlights the educational, fiscal, and societal gains of a quality early care system. Education has always had an important place in economic growth models. This section first provides a background for understanding the incorporation of education in economic models through a discussion of important literature in the field. Next this section examines relevant research that has attempted to incorporate the economic impact of quality early care and education programs into these models. This section concludes with a review of several studies that have attempted to produce cost-benefit analyses of various quality child care initiatives. These studies all found that the long-term benefits of quality in child care far outweighed the short-run costs.

Solow (1957) described three sources of economic growth: increases in the stock of physical capital (i.e., 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 contributed 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 by taking into explicit account the role of education. He estimated that between 1929 and 1982, increasing levels of education accounted for 16% of the growth of total potential output in nonresidential businesses. Moreover, education accounted for a full 30% of the per person employment growth in the nonresidential business sector. Finally, Jorgenson and Stiroh (2000) found that education contributed 8.7% of total economic growth between 1959 and 1988, and 13% of the growth in output per worker.

Dickens, Sawhill, and Tebbs (2006) investigated the impact of early education on the economic growth model. They used the finding that, by age 27, members of the High Scope/Perry Preschool Program group were found to have 0.9 greater years of educational attainment than non-program members. Using their model, they found that an additional 0.9 years predicted an increase in gross domestic product (GDP) by 2080 of over two trillion 2005 dollars. This is a GDP increase of approximately 3.5%.[25] If the returns to early education in Georgia were similar to this program, this means that Georgia's economy would also expand by an additional 3.5% over the same period.

In addition to long-term overall impacts on GDP, research has shown there are other shorter term fiscal benefits to investing in a quality early care program. Each of these studies has found that the economic benefits far outweighed program costs. For example, the High Scope/Perry Preschool Program recouped as much as $17 in benefits for every $1 expended (Barnett, Belfield, and Nores, 2004), and the Abecedarian Early Childhood Intervention saw a 7% internal return rate for each $1 (Masse and Barnett, 2002). Finally, the Chicago Child-Parent Pre-School Center and Expansion Program recouped $7.14 for every $1 investment (Reynolds, Temple, Robertson, and Mann, 2001).

It is important to note that these outcomes are based on the impacts of small-scale, high-quality early care programs. To investigate whether or not these benefits would hold for a broader early education policy, Belfield (2006) provided empirical estimates of the costs and benefits of expanding early care programs across three states: Massachusetts, Wisconsin, and Ohio.[26] Belfield notes that the quality of these state-run programs is important. Each of his estimates are based on time-intensive investments of an early care program and assume high-quality provisions, such as a rating of 5 or above on the Early Childhood Environment Rating Scale–Revised (ECERS-R) (Harms, Clifford and Cryer, 2005). Belfield found cost savings of increased school system efficiency, primarily through a reduction in special education placement and grade retention. In Massachusetts, for example, per-child expenditures increased by approximately $58,000 when a child was placed in special education. Because of early care programs, enrollments in special education were predicted to fall between 8.5% and 12%, thus reducing the costs associated with special education. Cost savings were also found in increased tax revenues in two ways: 1) parental work allowed for $9 million in gains, and 2) greater labor effort and participation by early care children in adulthood allowed for gains between $50 million and $98 million. Belfield found the largest returns from early care investments could potentially arise from reductions in criminal activities. Savings to the criminal justice system were estimated at between $201 and $288 million.

Finally, Belfield (2006) offered a detailed itemization of the cost of expanding an early care program to a single cohort and the fiscal impacts of the expansion. In Massachusetts, 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 $105 million in benefits, 42% came from savings across the criminal justice system, 30% from the K-12 school system, and 14% from higher earnings in adulthood. Belfield calculated that by the time a student finishes high school, at least 50% of the initial investment had been recouped. Results in the other two states were even more dramatic. Wisconsin realized a 1.43 benefit-cost ratio, while Ohio saw a 1.62 benefit-cost ratio.

[25]These calculations are based on the second endogenous growth model. The augmented Solow-Swann model predicted GDP increases of 1.34%, and the third endogenous growth model that allows for increasing returns predicted a 4% increase in GDP.

[26]Finding here will be presented for Massachusetts and are akin to the findings in Ohio and Wisconsin. For detailed findings on all three states, see Belfield, 2006.

The Short-Term Economic Impact of Quality Child Care Through Provider Expenditures

On average, parent fees per young child (infants through preschool) in this industry in Georgia range from $3,170 per year to $7,000 per year based on survey data. The average total yearly expenditure (parent fees, state and federal contributions, private and non-profit contributions) per child for all children in some form of care is $6,236 based on survey and administrative data (grants from federal and state governments and philanthropic institutions as reported in chapter 2). If the spending were higher, ensuring a high level of quality care for 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. However, to simulate the economic impact of raising the quality of care through higher expenditures, it is necessary to know how much quality care costs.

This section begins with a review of relevant research that has quantified the cost of quality in child care in other states. This section concludes with a discussion of the possibilities of quantifying the short-run impact of quality on the economy in Georgia, given the current available data. One possible model is discussed.

The average total yearly expenditure (parent fees, state and federal contributions, private and non-profit contributions) per child for all children in some form of care is $6,236 based on survey and administrative data …

Costs of Quality. According to Dickens, Sawhill, and Tebbs (2006), preschool enrollment increased by more than 100,000 children from 2002-2005 (NIEER Working Paper, 2007). Averaged across the United States, funding for state-funded preschool programs per child was $3,551 in 2004-2005. However, there is wide variation among states in their overall early care expenditures. Some states, like New Jersey and Oregon, spend twice the national average on each child. New Jersey, the top-ranked state in terms of expenditures, spends ten times as much as Maryland, the state with the lowest per-child spending. In 2004-2005, according to this study, Georgia averaged slightly higher than the national average at $3,900 per child (Dickens, Sawhill, and Tebbs, 2006).

The scope of this report does not include a definitive discussion of quality, nor does it evaluate the levels of quality within Georgia's early care system. However, a point of reference is needed for a discussion of costs. There are two generally accepted definitions of quality that pertain to early care and education centers. The first is process quality, which is the primary way children experience child care (Helburn and Howes, 1996). Process quality encompasses a child's interactions with adult caregivers and their exposure to materials that enhance learning. The second aspect of quality is structural quality. Structural quality refers to objective aspects of the child care environment such as adult-child ratios, teacher education and experience, and facility structure.

Two common measures of process and structural quality are the Early Childhood Environment Rating Scale–Revised (ECERS-R), for use in classrooms for 3-year-olds through kindergarten, and the Infant Toddler Environment Rating Scale–Revised (ITERS-R), used in infant and toddler classrooms. Created by researchers at the Frank Porter Graham Child Development Institute at the University of North Carolina–Chapel Hill, the ECERS-R and ITERS-R are used to measure child-teacher interactions, caregiver attitudes toward children, health and safety, presence of learning activities, and the presence of appropriate furnishings, equipment, and curricula materials (Harms, et al 2005). Both the ECERS-R and the ITERS-R have a seven point quality rating scale, which classify a classroom on each measure as (1) inadequate, (3) minimal, (5) good, or (7) excellent in meeting quality standards.

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 1993-94 and examined 401 child care centers that were comprised of 749 classrooms across California, Connecticut, Colorado, and North Carolina. Using 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, good adult work environment, and effective leadership by experienced directors.

Helburn and Howes (1996) 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, or about $300 per child annually.

A more recent study detailed the cost of high-quality preschool programs in New Jersey targeted to low-income 3- and 4-year-olds, known as the Abbott Preschool Programs. The program, administered by the public school system, is a 180-day, full-day program. Lead teachers are required to have a bachelor's degree and to be certified in early education. Classroom ratios are limited to 2:15. In 2006, local school districts spent an average of $11,521 per student (Belfield and Schwartz, 2007).

In a cost study of the Abbott preschools, researchers sought to examine what it would cost to raise quality (Belfield and Schwartz, 2007). Based on the assumption that the average ECERS-R score for each classroom would need to be raised to a six—the midpoint score for a high-quality center—the average center would need to raise their ECERS-R score by one unit, increasing costs by slightly more than 2%. This is a relatively modest cost, but it is based on raising the quality of an already relatively high-quality program even higher.

There are additional measures of the cost of quality. The high-quality Abbott Preschool Program in New Jersey was recently expanded state-wide at an estimated cost of $11,000 per child for school-based programs and $13,000 per child for center-based programs (Belfield and Schwartz, 2007). It should be noted, however, that operating costs in New Jersey are estimated to be about 25% higher than the national average.

The research to date suggest that there is a wide range of costs associated with "quality." These costs depend critically on the type of program (age group, level of need), the baseline (most studies focus on a single program and do not analyze quality or changes in quality state-wide), subsidies (North Carolina's increased standards were met with increases in health insurance support, scholarships, and wage subsidy supports), and other factors (Duncan and Gibson-Davis, 2006). These complications make it very difficult to present a "cost of quality" and to analyze the "impacts of quality." Heckman's research (Heckman, 2000; Heckman and Masterov, 2004; Heckman, Grunewald, and Reynolds, 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 very difficult to quantify and is dependent on the type of early care program being funded (e.g., Pre-K versus infant programs).

Simulation of Impact of Quality. While research demonstrates that quality child care has a positive impact on educational outcomes for children and increases the probability of success in employment and society at large over the long term, it is very difficult to estimate the cost of "quality" in Georgia. The evaluations of quality programs reviewed in this report each have a different starting point, serve different populations, and utilize different sources of funding. Because the gross receipts going into child care in Georgia are not differentiated by age group, it is nearly impossible to even speak of a baseline of the cost of care at current levels of quality in Georgia by age category. For example, TANF expenditures for child care amounted to $14 million in 2006, but that amount was spread over various types and levels of child care. Therefore, while an estimate exists of the cost of parent fees per child by age group, the total cost per child by age group is not available.

Another option for estimating the cost of quality in Georgia is available using data from Georgia's Early Care and Education Economic Impact Survey (discussed in depth in Chapter 6) and administrative data provided by BftS for this report. We are able to identify providers with the following awards and recognitions, which are associated with quality child care:[27]

- Centers: National Association for the Education of Young Children (NAEYC) accreditation, National AfterSchool Association (NAA) accreditation, BftS Center of Distinction, BftS Center of Recognition, or any BftS award; and
- Family: National Association for Family Child Care (NAFCC) accreditation, BftS Home of Distinction, BftS Home of Recognition, BftS Home of Merit, or any BftS award.

The survey data include the average weekly base-rate per child by age group, which can be analyzed for centers and family child care homes with and without recognitions or awards. A comparison of the weekly fees for centers and homes with distinctions and those without provides another estimate of the cost of quality. While this is an admittedly incomplete estimate, it is useful for purposes of illustration regarding the impact of quality on the economy.

The reported parent fees for centers with any distinction or award are between 3% and 25% higher than centers without any distinction. The reported parent fees for family child care homes with any distinction or award are, on average, 8.8% higher than fees in family child care homes without any distinction. If these differences reflect the cost of quality in Georgia, then increasing the reported parent fees to match the fees for the centers/homes with accreditation or awards provides one estimate of the additional cost of quality in the state. These estimated increased "prices of quality" were used to calculate the new level of parent fees. This calculation yields an additional $180 million in parent fees across all types of care for centers and families. Using the IMPLAN model once again, such an increase in gross receipts generates an additional $127 million in economic activity in the state through induced and indirect impacts throughout the state's economy.

This exercise has shown the potential economic impact of an increase in child care quality in Georgia. It is largely illustrative, but as a conservative estimate, attests to the additional potential of this industry.

Summary of the Economic Impact of Quality in the Early Care and Education Industry

This chapter examined the difficulty of quantifying "quality" in child care programs. While studies in several states have attempted to attach a dollar figure to increases in quality, these studies do not have a direct application in Georgia. The early care and education industry in each state is unique, and program mechanics and state regulations differ. Therefore initiatives aimed at increasing quality have different starting places, different populations served, and different goals. As a result, there is no accepted, universal formula for calculating the cost of increasing quality within the early care and education industry. However, studies do show that while quality does cost more money, the benefits of quality programs far exceed the costs.

This chapter also provided a possible model for calculating the additional cost of quality in the state. By no means a complete estimate or model, this calculation showed that if the average parent fee in the state was raised to the average fee charged by programs with state and national quality distinctions, the gross receipts of the industry would increase by $180 million. This additional revenue would in turn generate an additional $127 million in economic activity in the state.

[27] BftS is currently evaluating its approach to supporting early care and education providers in their efforts to increase the quality of their programs. This may result in a change to the Standards of Care program and the state's quality designations.

Chapter 5 – Demographic and Economic Profile of Georgia

Thus far, this report has presented the short-term and long-term economic impacts of the early care and education industry in Georgia. In order to fully appreciate the industry's impact as an economic development agent, it is important to understand the demand and supply pressures associated with child care in Georgia. This chapter details the demographic and economic trends that not only support the industry but necessitate it.

Various implications regarding the demand of different types of child care may be drawn from the demographic and economic characteristics of Georgia outlined in this chapter.

- Georgia's growing young population would seem to ensure new and rising demands of child care providers. Increasing diversity through population growth and migration may require the employment of multilingual staff and new innovations in child care based on cultural needs.
- Increasing numbers of single-parent families, children with working parents, and women in the workforce may translate into higher demands for child care. The presence of care, on the other hand, may encourage higher participation in the labor force by women.
- Georgia's dynamic economy is set to expand in the next decade. Employment in the service and retail sectors is expected to grow rapidly. Because many of these sectors may involve long and non-traditional work hours, child care providers must be able to satisfy these requirements.
- Growth in jobs that require advanced degrees may influence educational choices of the population and indirectly affect the type and quality of care chosen. Also, the presence of adequate child care would reduce barriers of entry into these professions by women and men with children.
- Families with children constitute the lion's share of poor families. Thus, the availability of affordable child care options and child care subsidies is critical in helping poor families.

Figure 5. Growth Rate of the Population in Different States, Various Years

Source: Census 1990 & 2000, American Community Survey 2006, U.S. Census Bureau

This chapter first examines population trends and projections in the United States and in Georgia specifically. Particular attention is paid to the school-aged and under 5 populations as well as to children living in poverty, to working mothers, and to racial and ethnic diversity in the state. Next, this chapter examines trends in family and labor force characteristics. The rise of single-parent households as well as the increased numbers of women in the labor force have a direct impact on the demand for child care. Finally, this chapter discusses employment trends in Georgia. As the state moves from a manufacturing-based economy to a more service-oriented one, the demand for a more highly educated workforce is expected to rise. This, along with the less traditional hours associated with the service sector, have implications about the future demand for child care in Georgia. Unless otherwise specified, all data in this chapter have been culled from U.S. Census raw data. The tables and figures in this chapter specify the particular type and year of census data used.

Table 7. Growth Rate of the Population in Georgia & in the U.S., by Racial & Ethnic Composition, Various Years

	Growth Rate of Population			
	1990–2000		2000–2006	
	United States	Georgia	United States	Georgia
Total	13.15%	26.37%	6.39%	14.38%
White	5.90%	15.81%	4.67%	9.18%
Black	15.58%	34.52%	6.91%	18.93%
Hispanic/Latino	57.94%	299.58%	25.34%	59.95%

Source: Census 1990 & 2000, American Community Survey 2006, U.S. Census Bureau

Population Trends in Georgia and in the United States

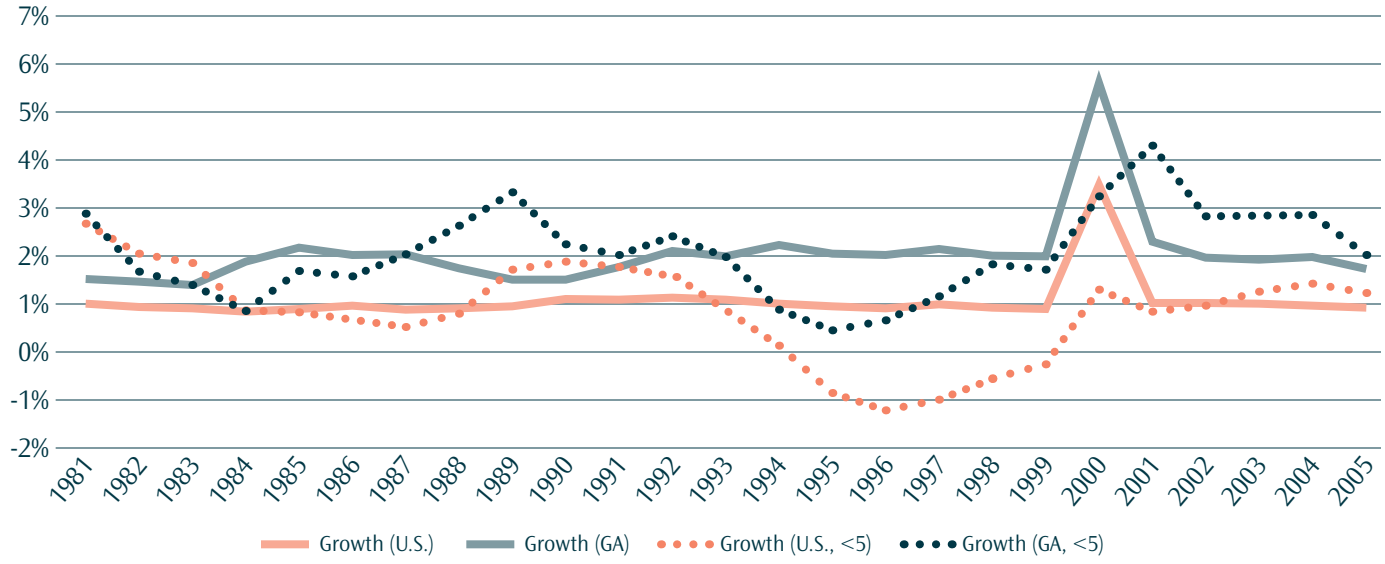
Population Growth Rates. Georgia has experienced higher population growth rates than the United States as a whole over the last 25 years. More than 9.3 million people reside in Georgia, the ninth most populous state in the nation. Georgia has witnessed dramatic growth of over 14% since 2000. Georgia's population growth rates have been much higher than the national average and states chosen as comparisons based on their early childhood education initiatives, as shown in Figure 5. Table 7 offers a racial/ethnic profile of this population growth.

Table 8. Age Group Specific Population Growth Rates in Georgia & U.S., by Racial & Ethnic Group, Various Years

	Growth Rate of Population Under 5 Years Old				Growth Rate of Population Aged 5 to 9 Years				Growth Rate of Population Aged 10 to 14 Years			
	1990-2000		2000-2006		1990-2000		2000-2006		1990-2000		2000-2006	
	United States	Georgia	United States	Georgia	United States	Georgia	United States	Georgia	United States	Georgia	United States	Georgia
Total	4.47%	20.10%	6.31%	17.44%	13.54%	27.20%	-3.90%	9.09%	19.95%	30.25%	0.73%	9.98%
White	-5.78%	8.73%	5.37%	11.59%	2.41%	13.32%	-4.40%	5.14%	11.43%	19.56%	-1.48%	3.74%
Black	0.68%	17.77%	3.56%	14.25%	20.01%	34.84%	-10.55%	5.71%	19.99%	35.10%	1.30%	12.34%
Hispanic/ Latino	55.73%	342.43%	26.72%	100.51%	65.17%	320.22%	13.29%	84.48%	58.04%	266.18%	24.02%	79.76%

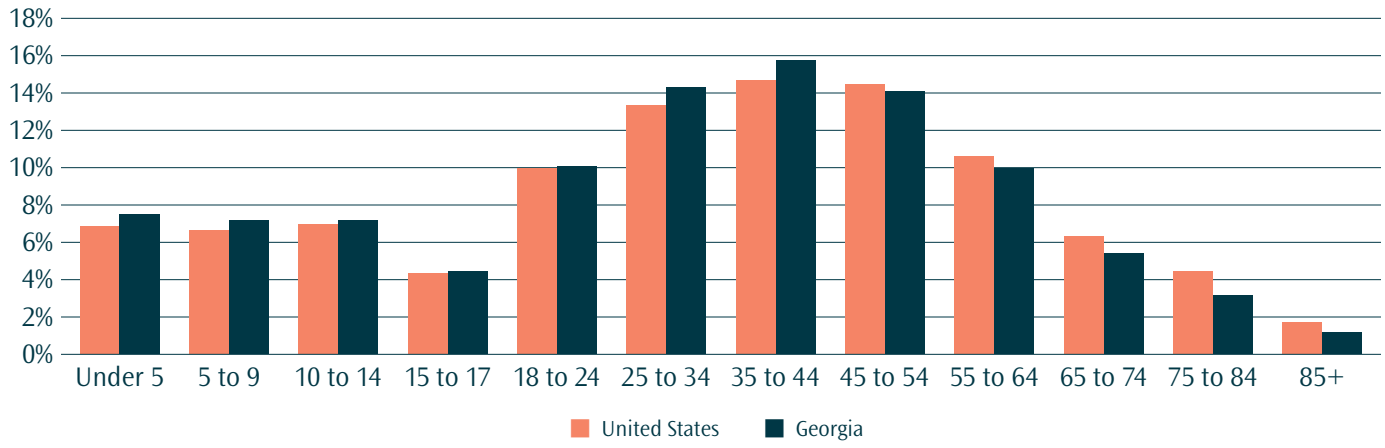
Source: Census 1990 & 2000, American Community Survey 2006, U.S. Census Bureau

Figure 6. Growth Rates of Total Population and Under 5 Population, Georgia and U.S. , Various Years



Source: Population Division, U.S. Census Bureau

Figure 7. Age Composition of Population in Georgia and U.S., 2006



Source: American Community Survey 2006, U.S. Census Bureau

As shown in Table 7, population growth rates in Georgia were twice that of the United States as a whole from 1990-2000 and from 2000-2006.[28] During this same time period, population growth rates in Georgia for children under age 5, from 5 to 9 years of age, and from 10 to 14 years of age were almost four times that of the United States as a whole as shown in Table 8. Figure 6 gives a visual representation of these data. Georgia's under age 5 population growth rate was much higher than the overall U.S. rate especially in the early 2000s. These

[28]The simple growth rate is calculated as the change in population between two years, divided by the level of the population in the earlier year. Note that, because the 1990-2000 period involves a greater number of years than the 2000-2006 period, if the *annual* growth rates were the same in both periods, the growth rate over the whole period should be higher for the 10 year span than for the 6 year span.

statistics suggest that growth in demand for child care in Georgia will be much greater than the demand for child care in many other states.

Georgia's age profile is younger than that of the overall United States, with a larger percentage of the population comprised of young children (in the under-5, 5-to-9, and 10-to-14 age groups) than in the U.S. as a whole, as shown in Figure 7. This is especially true for the under-5 population, whose proportion in the total population has been increasing since 2000. Thus, the demand for child care in Georgia will come from parents of children of all ages, but the largest swell in demand can be expected in early care and education.

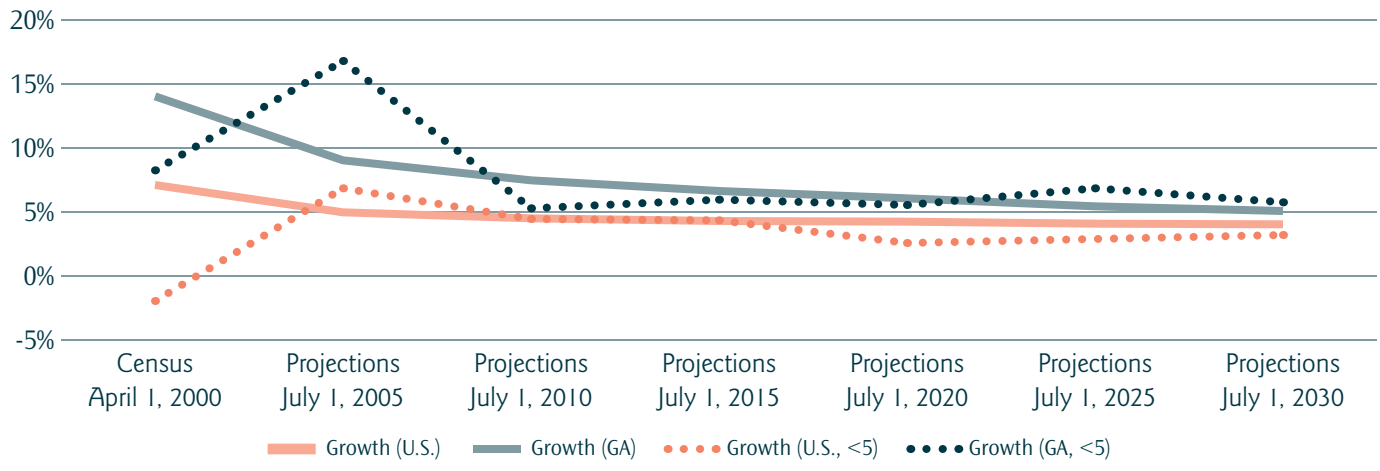
Table 9. Child Population Projections for Georgia, 2006-2030

Year	Child Population	By Age					
		< 1	1	2	3	4	5
2006	839,075	140,747	139,704	138,862	139,709	139,792	140,261
2007	845,457	142,621	141,444	140,521	139,694	140,531	140,646
2008	853,344	144,643	143,263	142,229	141,332	140,501	141,376
2009	862,425	146,731	145,248	144,009	143,012	142,102	141,323
2010	873,413	148,798	147,285	145,944	144,743	143,751	142,892
2015	925,729	156,937	155,783	154,767	153,794	152,758	151,690
2020	975,765	167,135	165,004	163,126	161,464	160,093	158,943
2030	1,102,126	188,068	186,309	184,583	182,830	181,070	179,266

Source: CDC Wonder (n.d.) United States Census Projections.

Population Projections. Examining the population projections, it is reasonable to conclude that these trends in the growth of the younger population may continue for the next 30 years. Georgia's population is expected to exceed 12 million by 2030. The number of children 5 and under will grow to more than one million by 2030 (Table 9). While the population growth rate for American children under age 5 is expected to fall below total population growth rates, Georgia's under-age-5 population growth rate is expected to be higher than the growth rate of the total state population in the later years of these projections (Figure 8). This has implications for Georgia's early care and education industry: An increased demand in the state for child care is likely to follow growth in the number of children, relative to the U.S. population.

Figure 8. Projected Growth Rates for Under 5 Population in the U.S. and in Georgia, Various Years



Source: Population Division, U.S. Census Bureau

Table 10. Racial and Ethnic Composition of the Georgia & U.S. Population, 1990 & 2006

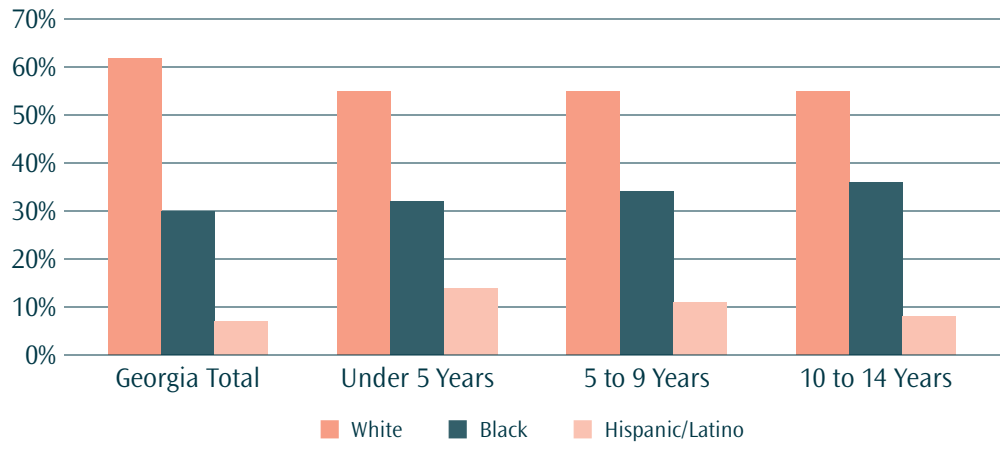
	1990		2006	
	United States	Georgia	United States	Georgia
White	80.29%	71.01%	73.93%	62.12%
Black	12.06%	26.96%	12.38%	29.84%
Hispanic or Latino	8.99%	1.68%	14.78%	7.43%

Source: Census 1990 & 2000, American Community Survey 2006, U.S. Census Bureau

Racial and Ethnic Profile of Georgia's Population. Georgia's population is racially and ethnically more diverse than that of both the overall United States and many other states, with the Hispanic population significantly increasing in recent years. As Table 10 shows, according to the latest U.S. Census Bureau statistics, Georgia's current population is 62% White, 30% Black, and 7% Hispanic. In 1990 it was composed of 71% White, 27% Black, and 2% Hispanic.[29] Interestingly, Figure 9 shows that the population aged 14 and under is much more diverse than the total Georgia population. Growth rates are also different, with growth rates of the Black population about twice that of the White population and with the Hispanic growth rates outstripping the Black and White population growth rates by a huge margin between 1990 and 2000 and between 2000 and 2006. Georgia's racial and ethnic diversity is also more pronounced than that of most of the comparison states (Figure 10). This is especially true in the case of the under-5, 5-to-9, and 10-to-14 age groups (Table 8).

Migration Patterns. Migration has contributed to Georgia's population growth and changing age profile. As displayed in Figure 11, Georgia experienced higher net migration relative to the comparison states (with the exception of Florida). As Figure 12 illustrates, the highest net migration between 1995 and 2000 for the 5–14-year age group occurred in Georgia (compared to the same set of states). Atlanta experienced the highest net migration of young adults among the 20 largest U.S. metropolitan areas in the U.S. between 1990 and 2000 (U.S. Census, 2000). Figure 13 shows that during the period of 1995 to 2000, migrants to Georgia from both other states and from abroad were quite diverse, with over half of the immigrants being Black and Hispanic.

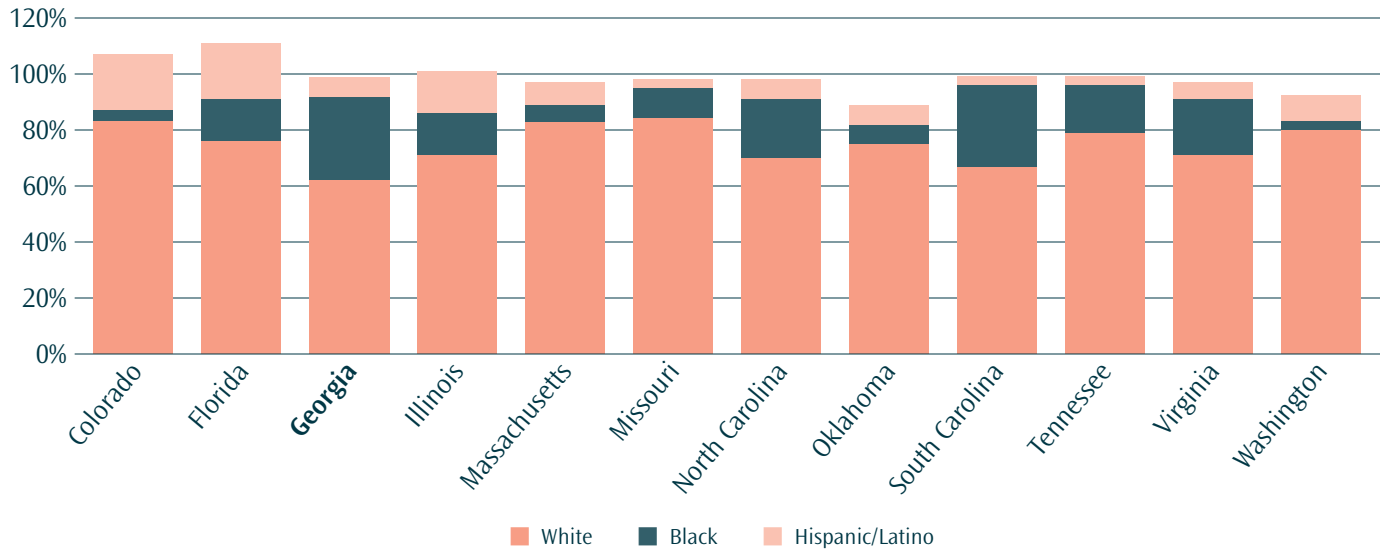
Figure 9. Racial & Ethnic Composition of Population in Georgia for Various Age Groups, 2006



Source: American Community Survey 2006, U.S. Census Bureau

[29]Other racial and ethnic groups are not separated out in this report due to their small size.

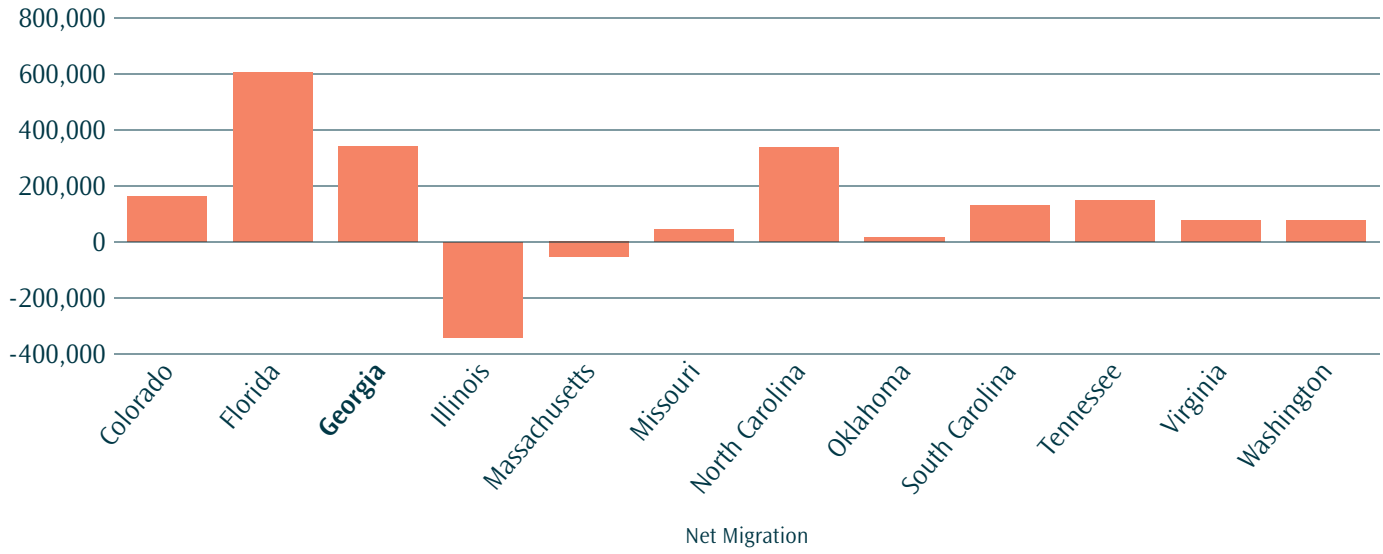
Figure 10. Race & Ethnicity of the Population in Different States, 2006 (% of total)



Source: American Community Survey 2006, U.S. Census Bureau

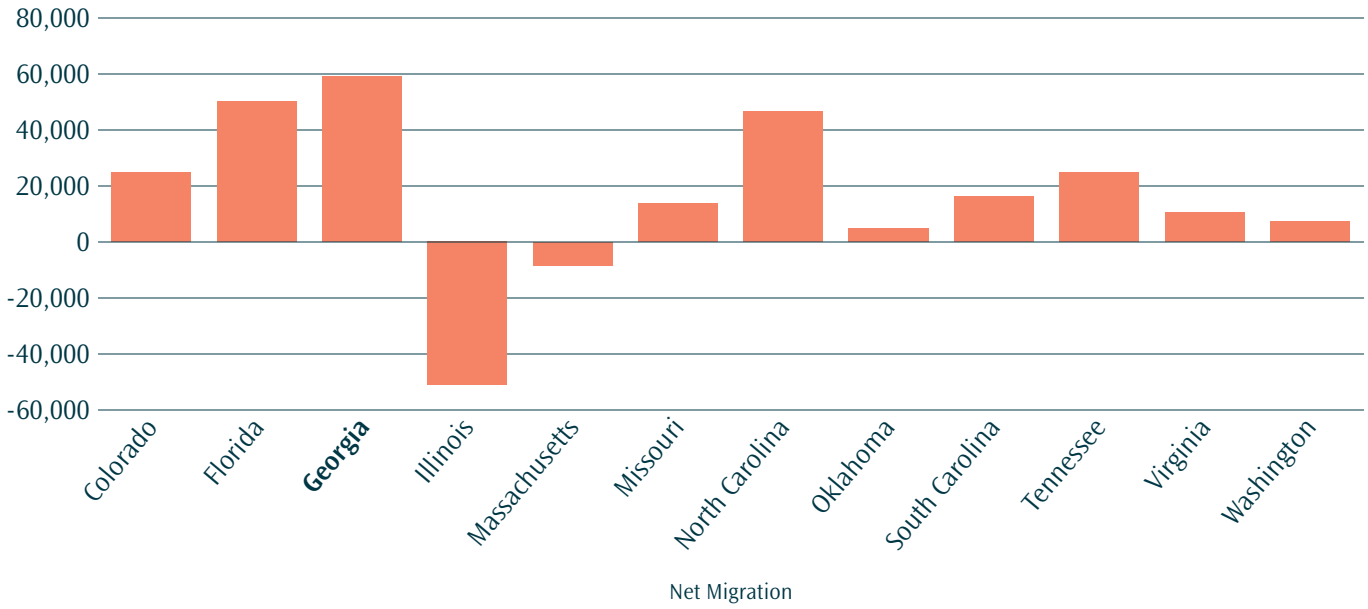
Note. Percentages will not add to 100 as Population considered Hispanic may be of any race. In addition, omitted races result in a percentage that does not total 100.

Figure 11. Five Year Net Migration in Georgia & Other States, All Migrants (1995-2000)



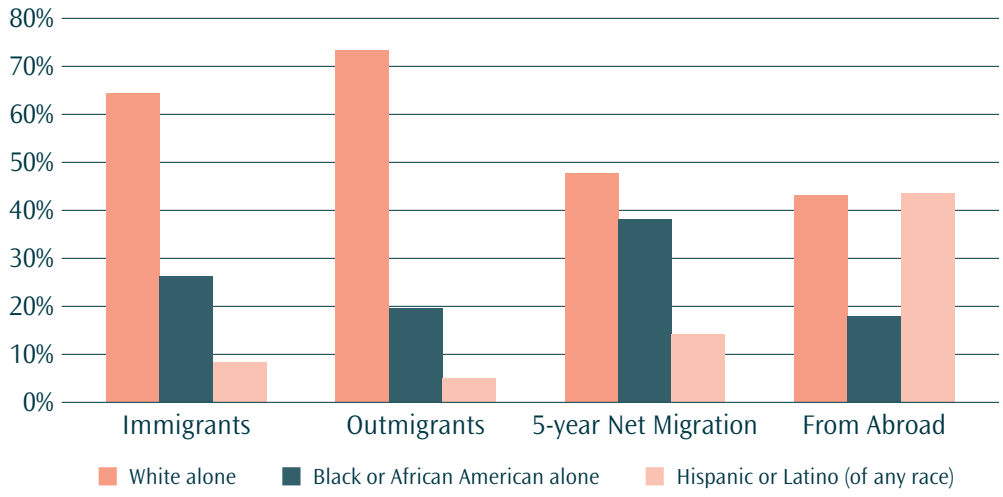
Source: U. S. Census Bureau, Census 2000, special tabulation

Figure 12. Five Year Net Migration in Georgia & Other States, 5–14-Year-Olds 1995–2000



Source: U. S. Census Bureau, Census 2000, special tabulation

Figure 13. Racial & Ethnic Composition of Georgia's Migrants, 1995–2000 (% of total)



Source: U. S. Census Bureau, Census 2000, special tabulation

Note. Percentages will not add to 100 because the population considered Hispanic may be of any race. In addition, omitted races result in a percentage that does not total 100.

While in no way conclusive, one may assume broad implications for child care needs from the above demographic data. Georgia's child care needs have grown at a higher rate than the overall United States as a result of Georgia's higher population growth rates of young children. Georgia will continue to grow faster than other states and areas of the country according to population projections. Services for child care will also be required to address the growing diversity in the population. This diversity could mean new challenges for the state's child care providers, including the need for speakers of languages other than English.

Trends in Family and Labor Force Characteristics

Family characteristics and the labor force participation of parents also play an important role in determining child care needs. Single-parent households and family households in which both parents work may be expected to have a higher need for child care, and corresponding increases in these types of households would lead to growing demands for child care.

Family Characteristics in Georgia. Georgia has a lower percentage of married-couple families and a higher percentage of female-headed families with children when compared to the overall United States (Table 11). A larger percentage of female-headed households also have children under age 6 in Georgia when compared to the overall United States (Table 11).

Labor Force Participation in Georgia. As shown in Figure 14, the Georgia civilian labor force, which includes the employed and the unemployed who are actively looking for work, increased from 3.3 million in 1990 to over 4.7 million in 2006. Georgia experienced high annual growth rates of labor force participation in the 1990s with lower rates in the early 2000s. The Georgia Department of Labor (2004) estimates an increase of 770,000 jobs over 10 years (2004-2014) with an annual increase of 1.7%.

Table 11. Percentage of Population in Georgia & in the U.S. by Family Type, Various Years

Family Type by Presence & Age of Related Children, 2000

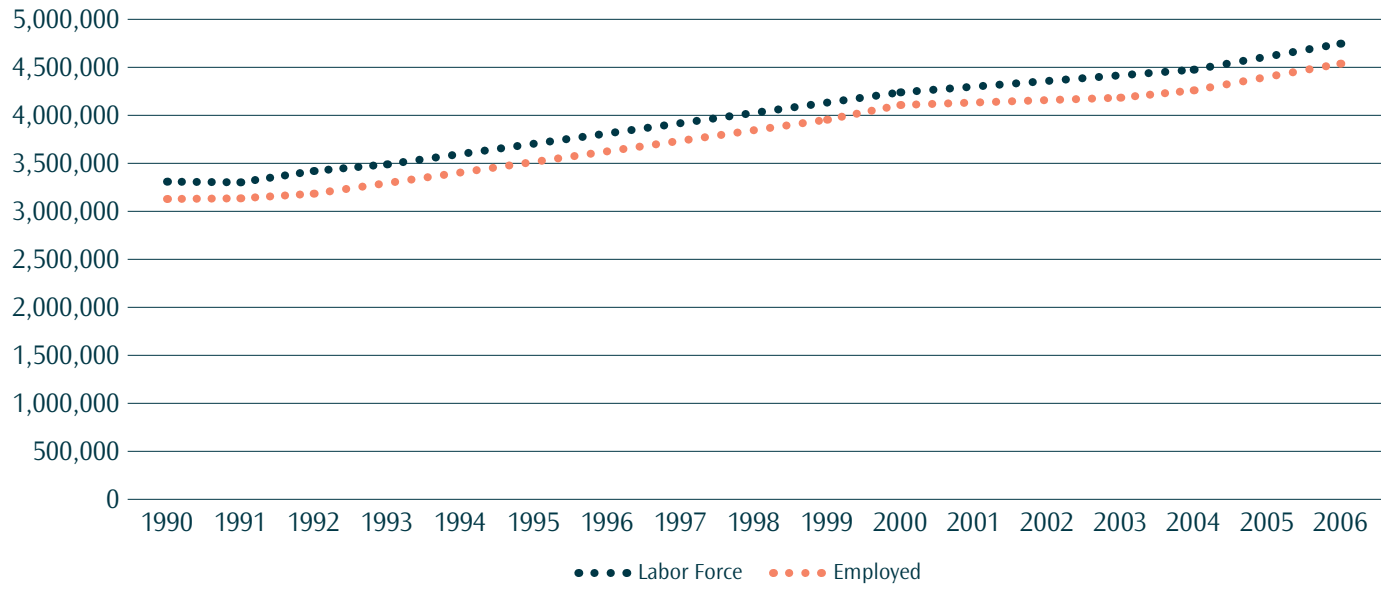
	Married Couple Family	Under 6 Years Only	Under 6 Years & 6 to 17 Years	6 to 17 Years Only	Female Householder, No Husband Present	Under 6 Years Only	Under 6 Years & 6 to 17 Years	6 to 17 Years Only
United States	75.91%	8.79%	8.13%	19.46%	17.97%	2.60%	2.39%	7.26%
Georgia	73.35%	9.40%	7.96%	19.44%	20.62%	3.13%	2.93%	8.49%

Family Type by Presence & Age of Related Children, 2006

	Married Couple Family	Under 6 Years Only	Under 6 Years & 6 to 17 Years	6 to 17 Years Only	Female Householder, No Husband Present	Under 6 Years Only	Under 6 Years & 6 to 17 Years	6 to 17 Years Only
United States	74.46%	8.00%	7.63%	18.61%	18.67%	2.59%	2.53%	7.76%
Georgia	71.38%	8.16%	7.52%	18.46%	21.44%	3.02%	3.20%	9.37%

Source: Census 2000, American Community Survey 2006, U.S. Census Bureau

Figure 14. Labor Force Participation & Employment in Georgia, 1990–2006



Source: American Community Survey, Various Years

As the data in Table 12 indicates, labor force participation of women in Georgia (70.8%) was slightly lower than that of the overall U.S. (71.9%) in 2006. Of the states listed, Georgia has the third lowest labor force participation rate among women. However, the labor force participation among women with children in Georgia is roughly the same (adding the percentages in the columns with children gives 26.0%) as the U.S. average (25.9%).

A large percentage of Georgia's labor force has young children. As displayed in Table 13, an analysis of 2006 U.S. Census data focused on parental employment status by living arrangements in Georgia finds that 53% of young children who live in dual-parent households have two working parents. Among single-parent households, most parents are employed. In the case of single-mother households with young children in Georgia, 75% of the mothers are employed. In single-father households with young children in Georgia, 89% of the fathers are employed. Among school-aged children (6 to 17 years), about 64% in dual-parent households have two working parents in Georgia; in single-parent households, most fathers or mothers are employed (86% and 82% respectively). It is interesting to note that female single parents and mothers in dual-parent households participate in larger numbers in the labor force as their children grow older. This could imply that the provision of child care for young children may encourage higher participation in the labor force by women.

As shown in Table 14, the rise in the number of single-parent families since 1990 has translated into an increased need for child care. If the number of single-parent families, female-headed families, and women in the workforce continues to rise, this is likely to result in further increases in the demand for child care in the future. With Georgia's distinctive trends in family types and female labor force participation when compared to the overall United States, its child care needs may differ from the nation's needs in general.

Table 12. Labor Force Participation Rates of Female Population Aged 20 to 64 Years in the U.S. & Various States, 2006

Employment Status of Women Aged 20 to 64 Years, Total	Total	With Children Under 6 Years of Age	With Children Under 6 Years of Age & 6 to 17 Years	With Children Between 6 & 17 Years of Age	With No Children Under 18 Years of Age
United States	71.92%	5.24%	4.64%	16.00%	46.03%
Georgia	70.77%	5.13%	4.81%	16.08%	44.75%
Colorado	74.22%	5.80%	4.65%	15.40%	48.37%
Florida	70.91%	4.81%	4.13%	15.30%	46.67%
Illinois	73.48%	5.52%	4.73%	16.34%	46.89%
Massachusetts	76.61%	5.57%	4.09%	16.63%	50.32%
Missouri	73.92%	5.83%	5.07%	17.26%	45.76%
North Carolina	72.00%	5.49%	4.60%	16.52%	45.39%
Oklahoma	69.14%	5.45%	5.05%	15.39%	43.26%
South Carolina	71.10%	5.04%	4.55%	16.37%	45.14%
Tennessee	69.54%	5.33%	4.40%	15.81%	44.00%
Virginia	74.50%	5.56%	4.60%	16.43%	47.91%
Washington	72.05%	5.36%	4.29%	15.39%	47.01%

Source: American Community Survey 2006, U.S. Census Bureau

Table 13. Employment of Parents by Living Arrangement of Children in Georgia & the U.S., 2006

Age of own children under 18 years in families & subfamilies by living arrangements by employment status of parents

Children Under 6 Years of Age	Living With Two Parents			Living With One Parent	
	Both Parents in Labor Force	Father Only in Labor Force	Mother Only in Labor Force	Father in Labor Force	Mother in Labor Force
United States	54.82%	40.30%	2.82%	88.55%	72.36%
Georgia	53.04%	42.72%	2.14%	89.42%	74.82%

Children Between 6 & 17 Years of Age	Living With Two Parents			Living With One Parent	
	Both Parents in Labor Force	Father Only in Labor Force	Mother Only in Labor Force	Father in Labor Force	Mother in Labor Force
United States	64.33%	29.38%	3.85%	87.14%	79.63%
Georgia	64.41%	30.06%	3.30%	86.22%	81.88%

Source: American Community Survey 2006, U.S. Census Bureau

Family Income in Georgia. Median family income in Georgia is slightly below that of the national average (Table 15). The data in Table 16 show the distribution of families in poverty. Of all families in Georgia, 10.5% were below poverty in 2002 and 11.1% were below poverty in 2006 (in the U.S. at large, 9.8% of families were below poverty in 2006). About 31% of those families in poverty were married-couple families, while 69% were non-married families. The largest share of families in poverty in Georgia were those headed by non-married females. These families constituted 63% of all families in poverty in 2002 and 60% in 2006. Though the percentage of families earning incomes below the poverty level in Georgia has seen a slight increase from 2002, the concentration in the percentage of "poor" female-headed families has seen a 3 point drop.[30] Families with children constituted the lion's share of poor families and face extremely restricted child care choices.

Table 14. Employment of Parents by Presence of Children Under 6 in Georgia, Various Years

	1990	2000	2005
In two-parent families, both parents in labor force	239,797	245,958	265,742
In single-parent families, parent in the labor force	105,539	149,867	208,091
Total children under 6 needing child care, as parents work	345,336	395,825	473,833

Source: Census 1990 & 2000, American Community Survey 2006, U.S. Census Bureau

Table 15. Median Incomes in Georgia & in the U.S. by Family Type, 2006

	United States	Georgia
Median family income (all families)	$58,526	$56,112
Married-couple family	$69,027	$68,778
With children under 18 years	$72,948	$72,012
No children under 18 years	$65,685	$65,591
Female householder, no spouse present	$29,022	$26,955
With children under 18 years	$23,008	$22,783
No children under 18 years	$39,914	$34,974

Source: American Community Survey 2006, U.S. Census Bureau

Note: "Own children" are legal children of either or both partners of the household.

Table 16. Percentage of Families in Poverty by Family Type in Georgia, Various Years

	2002	2006
Married-couple families	**30.70%**	**30.49%**
With related children under 18 years	18.16%	18.21%
Under 5 years only	3.03%	3.74%
Under 5 years & 5 to 17 years	7.72%	6.92%
5 to 17 years only	7.42%	7.55%
No related children under 18 years	12.54%	12.28%
Families with male householder, no spouse present	**6.68%**	**9.77%**
With related children under 18 years	3.97%	7.22%
Under 5 years only	0.94%	1.68%
Under 5 years & 5 to 17 years	1.48%	1.38%
5 to 17 years only	1.55%	4.16%
No related children under 18 years	2.70%	2.56%
Families with female householder, no spouse present	**62.62%**	**59.74%**
With related children under 18 years	56.48%	53.04%
Under 5 years only	12.10%	10.14%
Under 5 years & 5 to 17 years	13.67%	13.85%
5 to 17 years only	30.71%	29.06%
No related children under 18 years	6.14%	6.69%

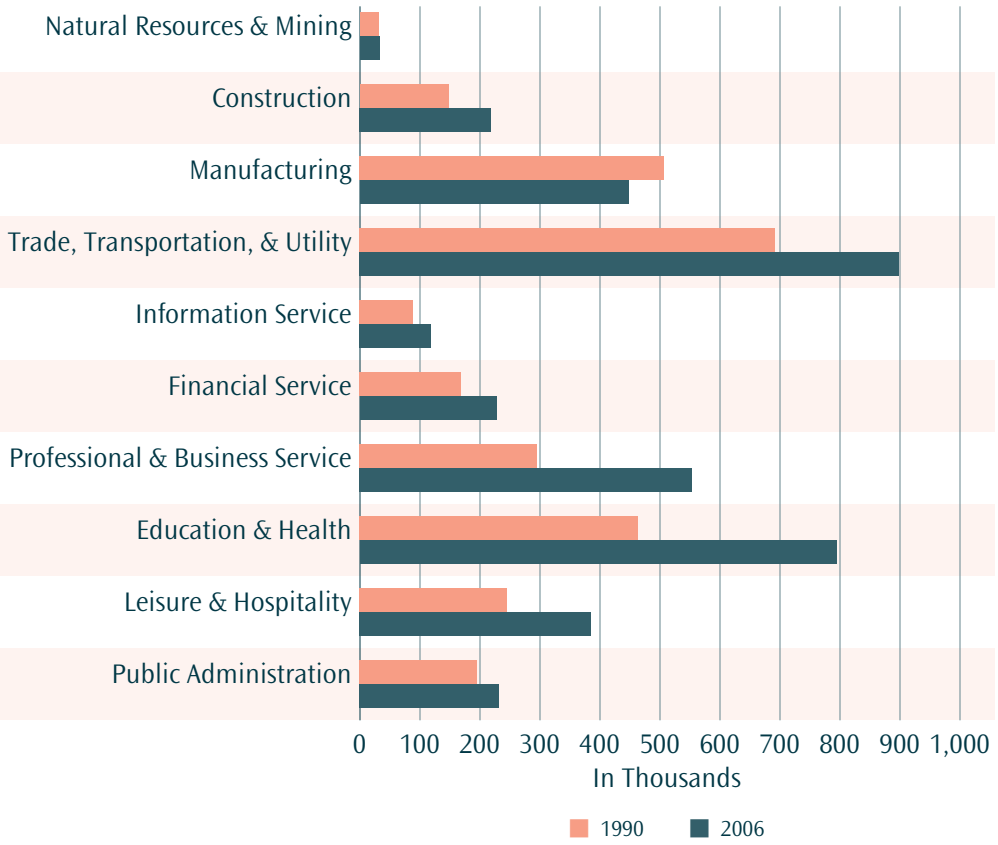
Source: American Community Survey 2006, U.S. Census Bureau

[30]In 2002, the poverty line for a family of four was $18,100 (U.S. Department of Health and Human Services).

Employment Trends[31]

Trends in Georgia's Labor Market. Georgia's workforce is becoming increasingly diversified with Georgia's growing economy. Trade, transportation, financial and business services, and the education and health sectors have experienced large increases in employment over the last 15 years (Figure 15).[32] The service industry has seen large gains in the professional, business, financial, education, and health sectors (Figure 16), a trend mirrored nationally and by many states. This trend is expected to continue with 94% of growth in employment from 2004 to 2014 attributed to the service sector (Georgia Department of Labor [DOL], 2004). Figure 17 presents the ten year projected growth rate in employment for each of these sectors. These increases would bring about a rise in administrative services in which 100,000 new jobs are expected to be created. While the construction sector is projected to expand, manufacturing job growth will most likely hold steady, and textiles and apparel occupations are expected to shrink (DOL, 2004).

Figure 15. Employment by Sectors in Georgia, 1990 & 2006



Source: Georgia State Statistics System, http://www.georgiastats.uga.edu

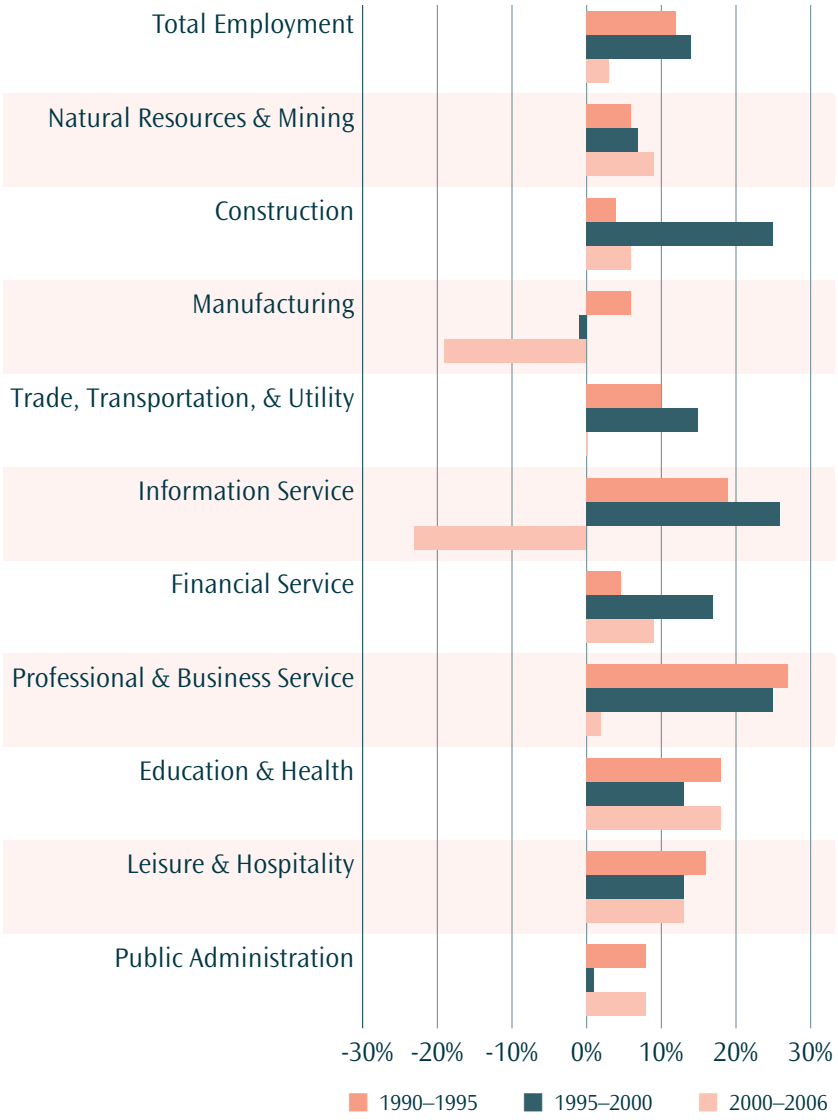
According to Census data on employment by industry by age, growing industries such as health care, entertainment, professional and technical services, and leisure and hospitality employ larger shares of young workers (less than 40 years old) than some other industries that are growing less quickly, such as wholesale trade, utilities, and mining. If these trends continue, there will be increasing demand by workers in these growing industries for additional child care.

Trends in the Education of the Georgia Labor Force. While in 2004 over 71% of the jobs in Georgia did not require any formal education higher than a high school degree, this trend is expected to decline over the next decade. Jobs requiring associate or higher degrees are projected to grow faster than growth of total occupations. Though the percentage of the population in Georgia with high school diplomas and bachelor's degrees has increased from 2002 to 2006 (Table 17), it is still below the overall U.S. average of 84% and 27%, respectively. As a result,

[31]These data were taken from the U.S. Economic Census and pertain to establishments with payroll. Some industries, such as agriculture and forestry, are categorized under "nonemployer" industries in the Economic Census. In 2002, the total employment for agriculture and forestry was estimated by the Census to be 2,500 to 4,999; in 2005 it was estimated as 2,577.

[32]Child care services are classified in the "Education and Health" category.

Figure 16. Growth in Employment by Sectors in Georgia, Various Years



Source: Georgia State Statistics System, http://www.georgiastats.uga.edu

an increase in demand for people with higher education for high paying jobs would further influence migration. In addition, a more highly educated population is likely to increase the percentage of the population that is employed. As shown in Table 18, while 82% of the population in Georgia with a bachelor's or advanced degree was employed in 2005, only 55% of the population with less than a high school degree was employed.

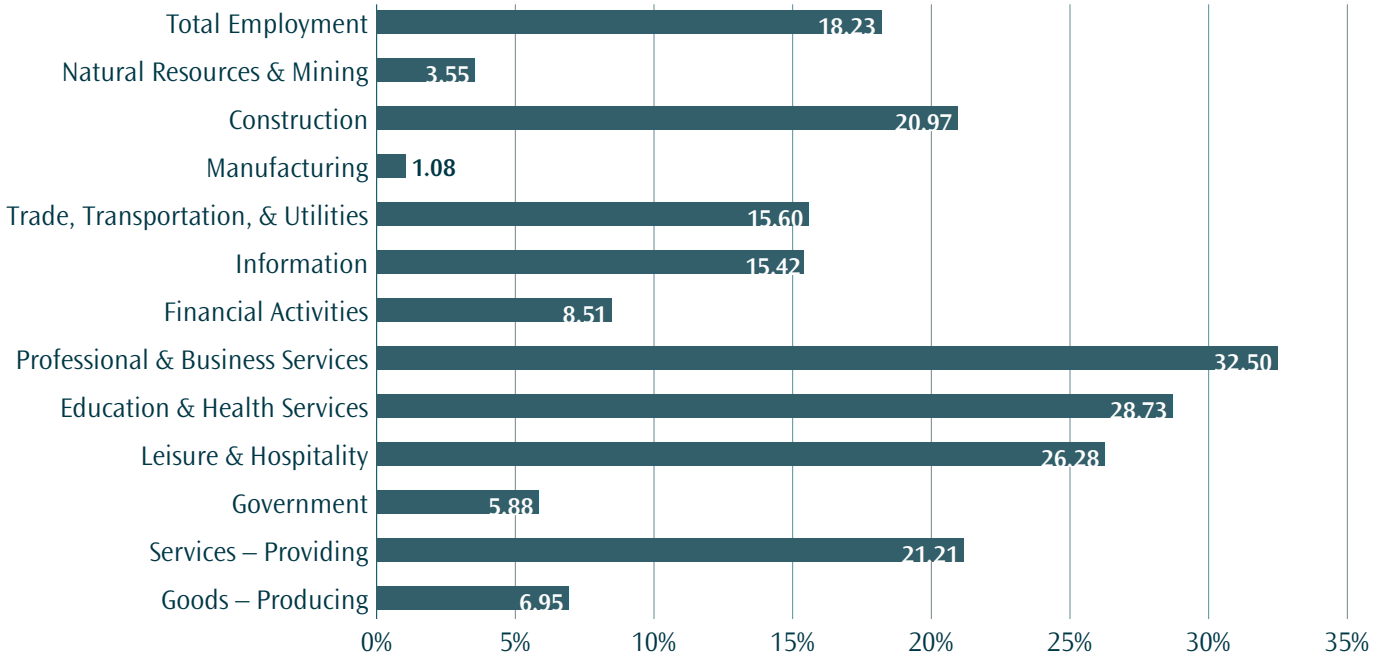
The increase in high skill jobs with long, dynamic work hours and jobs with non-traditional working hours in sectors such as health care and retail may result in an increase in demand for child care during these non-traditional and extended work hours. If quality of child care is positively influenced by higher incomes and education, one may expect an increase in the demand for quality child care.

Summary of Demographic and Economic Profile of Georgia

This chapter presented the demographic and economic characteristics that both support and necessitate the early care and education industry in Georgia. Several demographic trends promise to affect the demand for child care options in coming years. The state has a growing young population that promises new and rising demands of child care providers in the future. An increasingly diverse population may require the employment of multilingual staff and new innovations in child care based on cultural needs. Increasing numbers of single-parent families, children with working parents, and women in the workforce may translate into higher demands for child care. With Georgia's large and increasing population under 5 years old, the presence of adequate child care options could encourage higher participation in the labor force by women.

Georgia's dynamic economy also offers indicators of future demand for child care. In the next decade, employment in the service and retail sectors in Georgia are expected to grow rapidly. Because many of the jobs in these sectors may involve long and non-traditional work hours, child care providers must be able to satisfy these needs. Additionally, as the state moves from a manufacturing-based economy to a more service-based one, the demand for a more highly educated workforce is expected to rise. Growth in jobs that require advanced degrees may influence educational choices of the population and indirectly affect the type and quality of care chosen. Also the presence of adequate child care could reduce barriers of entry into these professions by women and men with children.

Figure 17. Ten Year Projected Growth Rate in Employment by Sectors in Georgia, 2004–2014



Source: Based on data retrieved from Georgia Labor Market Explorer

Table 17. Educational Attainment of Population Age 25 and Over in Georgia, 2002–2006

	2002	2003	2004	2005	2006
Percent high school graduate or higher	81.5%	80.9%	81.0%	82.8%	82.2%
Percent bachelor's degree or higher	24.4%	25.7%	25.6%	27.1%	26.6%

Source: American Community Survey, Various Years

Table 18. Labor Force Participation and Employment by Educational Levels in Georgia, 2005

	In Labor Force	Employed
Less than high school	61.60%	55.10%
High school graduate	75.80%	70.20%
Some college or associate's degree	80.00%	74.90%
Bachelor's degree or higher	85.00%	82.10%

Source: American Community Survey, 2005

Note. As percentage of population aged 25 to 64 years

Chapter 6 – Early Care and Education Industry Profile

The previous chapter of this report examined population and workforce trends in Georgia, both of which are expected to influence the demand for child care in the future. This chapter offers a profile of the current early care and education industry in the state. 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 early care and education providers in Georgia conducted in 2007. This survey was conducted specifically for this report to fill gaps in knowledge about the industry not available from any existing source. The data acquired through the responses from 4,748 center-based providers and family child care providers to this survey not only supplied important input for the economic analysis, they also provided important information about the early care and education industry in Georgia.

Georgia's Early Care and Education Economic Impact Survey presents a profile of the early care and education industry in Georgia, some of the most interesting findings from which are:

- The industry serves children of all races and ethnicities, but the percentage of Black children in care represents a larger portion than the proportion of Black children in the state at large.
- Centers and family child care homes serve children of need—45% of children in centers and 24% in family child care homes receive free or reduced-price lunch.
- Most centers and family child care providers operate on a 12-month basis; 40% of family child care providers and 30% of centers offer care on Saturdays, Sundays, and/or holidays.

- The average weekly parent fee for infants ranges from $70 to $120 for family child care homes and from $80 to $145 for centers depending on geographic area.
- The average wage for administrators in centers is $13.57 per hour; lead teachers earn an average of $10.45 per hour; and other teaching staff earn, on average, $7.94 per hour. In family child care homes, the average hourly wage for paid assistant caregivers is $7.09. Paid leave, paid holidays, and paid time-off for training are among the most often offered benefits in centers.

This chapter first provides a profile of the children currently served by the early care and education industry in Georgia. Next, it examines the operations of both family child care homes and child care centers, including hours of operation, number of children served, annual revenues, and types of revenue sources. Finally, this chapter profiles the early care and education workforce in Georgia. Particular attention is paid to the wages earned by these workers and the benefits offered to them. Additionally, their racial and gender composition and levels of education are examined.

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

Profiles of the Children Served by Georgia's Early Care and Education Providers

Characteristics of Children Served by the Industry. Across the state, in family-based care, 39% of children whose race/ethnicity was indicated in the survey are White, 56% are Black, 3% are Hispanic, and 3% are some other race/ethnicity. In center-based care, 44% are White, 40% are Black, 7% are Hispanic, and 4% are Other.[33] The percentages of White and Black children in particular are very different from the demographics of the state found in Census data, in which 58% of children between birth and age 13 are White and 35% are Black (Census 2000). This disparity may reflect a difference in fertility rates by race and/or a difference in the rates of mothers staying at home with young children by race (Hamilton et al, 2007; Cohany and Sok, 2007).

The data acquired through the responses from 4,748 center-based providers and family child care providers to this survey not only supplied important input for the economic analysis, they also provided important information about the early care and education industry in Georgia.

Few of the children in either type of child care setting had either English as a Second Language (ESL) needs or a diagnosed disability. Statewide, for 2.5% of children in family child care homes and for 5.9% of children in center-based care, English is not their first language. According to the U.S. Census in 2000, 10% of individuals in Georgia above age 4 spoke a language other than English at home, thus, these rates of ESL are relatively low. In addition, only 4% of children in either type of child care environment have a diagnosed disability.

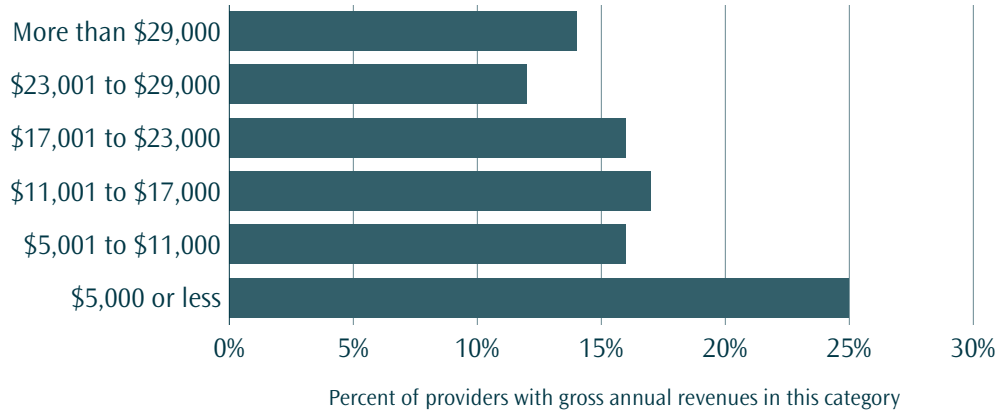
Program Participation Among Children. The survey asked questions about the participation of children in three programs which provide services or subsidies for children: 1) food programs, 2) Division of Family and Children Services (DFCS) subsidies, and 3) Babies Can't Wait (BCW) services. Children in early care and education environments may be enrolled in facilities that offer the U.S. Department of Agriculture's Child and Adult Care Food Program (CACFP) and/or Summer Food Service Program. Families qualify for services based on income eligibility guidelines. According to the survey, on average, 45% of children in center-based care and 24% of children in family child care homes across the state receive free or reduced-price lunch. For the state as a whole, 18% of children in center-based care and 17% of children in family child care homes receive Georgia DFCS subsidies. Finally, on average, 1.7% of children in family child care homes and 0.8% of children in center-based care in Georgia receive services from BCW, Georgia's early intervention provider for children under the age of three.

Operations Profiles of Georgia Center-Based and Family Child Care Service Providers

Provider Schedules. Of all center-based and family child care providers, 80% operate on a 12-month basis. Programs based in the public school system, such as some of Georgia's Pre-K Program sites and Head Start Program sites, are only available for nine months out of the year. Only a small number of family child care homes operate during the summer months exclusively. Most providers offered care Monday through Friday. However, over 40% of family child care providers and slightly less than 30% of center-based providers offer care for children on Saturdays, Sundays, and/or holidays. Finally, providers are open on average 10 to 11 hours on the days that they are open. 85% of children in center-based care and 83% of children in family child care homes are in full-time care, while the remainder are either in part-time care, before-school only care, after-school only care, or wrap-around (before- and after-school) care.

[33]The percentages do not sum to exactly 100% because some respondents did not fill out the question for all four race/ethnicity groups.

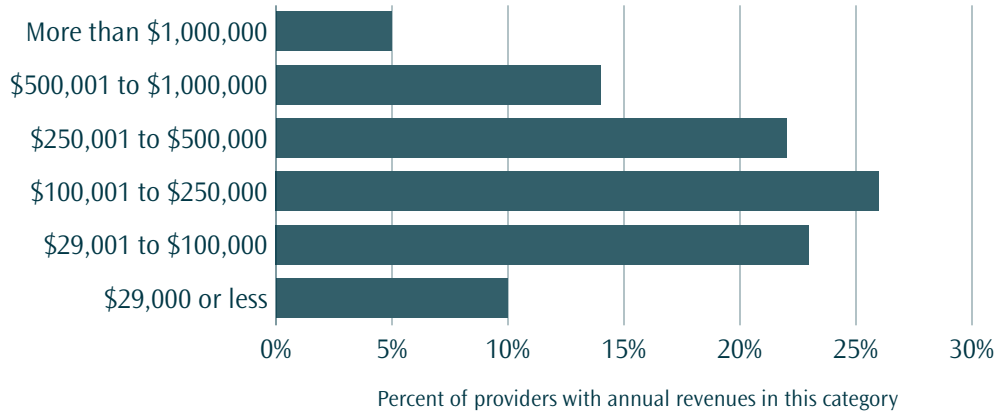
Figure 18. Distribution of Family Child Care Homes Gross Revenues by Amount, 2006



Licensed Capacity and Current Enrollment. On average, family child care providers report having 5.5 children in their care. State regulations do not allow family child care homes to receive payment for more than six children. The average licensed capacity reported by center providers is 99.8 children, with 73.1 being the average number currently enrolled. The difference between capacity and enrollment does not necessarily represent excess capacity because some providers may choose not to care for as many children as they are permitted legally. Accreditation requires lower enrollments than licensed capacity, and some providers may voluntarily choose lower enrollments to ensure quality care. Consistent with this, 62% of family-based and center-based providers report having a waiting list, which suggests that there is excess demand for care rather than excess supply. Note that waiting lists are not a perfect indicator of excess demand because most parents put their children on multiple waiting lists. Additionally, a provider might have a waiting list for infants but several available slots for other age groups.

Annual Revenues of Providers in 2006. For the state of Georgia, the median annual gross revenues per child were $2,750 for a family provider, $3,842 for the entire sample of center based providers (N=884) and $2,860 for a subset of those center providers who did not offer Georgia's Pre-K Program or Head Start programs (N=351). This last figure may be a more meaningful cost per child for center-based providers because state and/or federal requirements and the additional services provided in Early Head Start, Head Start, and Georgia's Pre-K Program cause the state and federal revenues for these programs to be greater per child than those for the average early care and education program.

Figure 19. Distribution of Center-based Care Gross Revenues by Amount, 2006

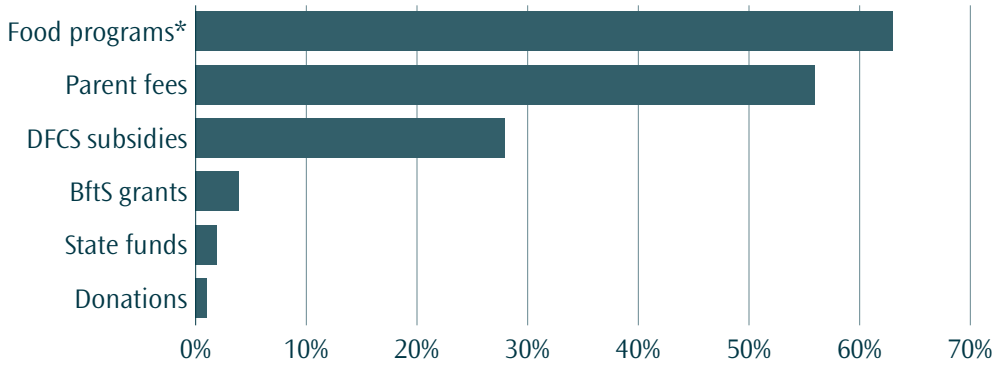


The average total gross annual revenues for family child care home providers were $20,774, with a median of $14,000. The average total net annual earnings for family home providers were $9,742, with a median of $6,000. The distribution of gross revenues for family providers is shown in Figure 18.

The average total annual revenues for centers were $533,502, with a median of $117,350. The distribution of gross revenues for centers is provided in Figure 19. Note that the highest revenue generating respondents may actually represent multiple sites.

These revenues may come from a variety of sources. The percentage of family child care home providers who report receiving any funding from six possible sources is presented in Figure 20. The percentage of center providers who report receiving any funding from eight possible sources is presented in Figure 21. The percentage that each revenue source contributed to their overall budget, given that they reported receiving any revenue from that source, is presented in Figure 22 for family child care homes and in Figure 23 for centers.

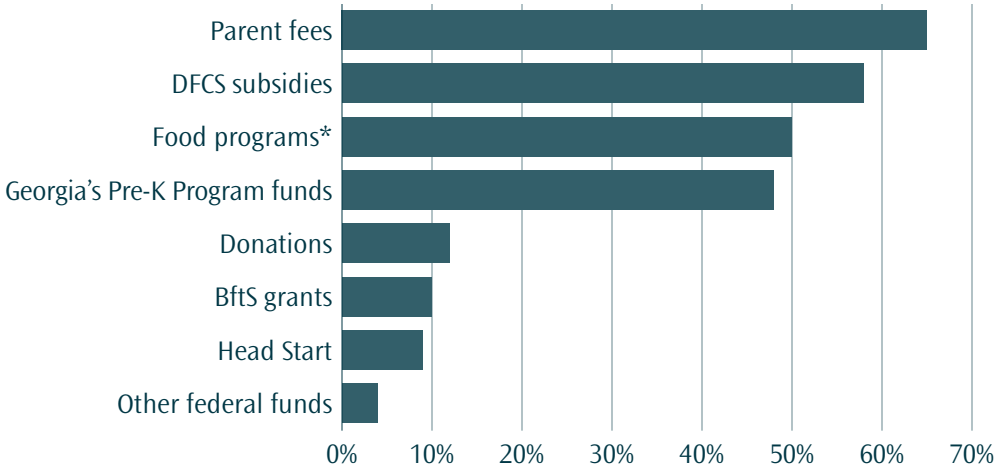
Figure 20. Percentage of Family Providers Receiving Program Revenues



*The CACFP and the Summer Food Service Program

Note: Family child care homes are not eligible for Georgia's Pre-K Program funds, Head Start, or other federal funds.

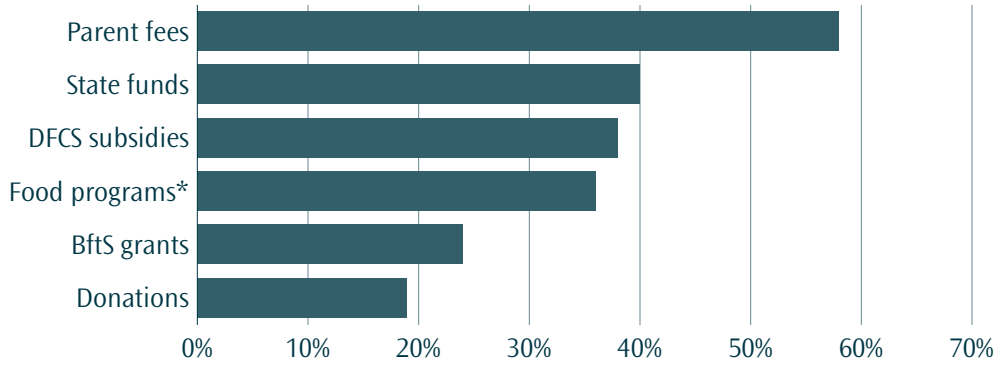
Figure 21. Percentage of Center Providers Receiving Program Revenues



*The CACFP and the Summer Food Service Program

Note: The survey did not ask center providers about the receipt of other state funds besides Georgia's Pre-K Program and BftS grants. If Georgia's Pre-K Program providers in the local school system and providers who only offer Head Start and Early Head Start programs are excluded, 86% of centers report receiving parent fees. Of those centers who did not report receiving parent fees, 36% reported receiving funds from DFCS subsidies, 43% reported receiving funds from food programs, 28% reported receiving funds for their Georgia's Pre-K Program, 8% reported receiving funds from charities, 4% reported receiving funds from BftS grants, 17% reported receiving funds from Early Head Start and Head Start, and 3% reported receiving other federal funds.

Figure 22. Percentage of Family Child Care Home Revenues (if Revenue Type Is Received by Provider)



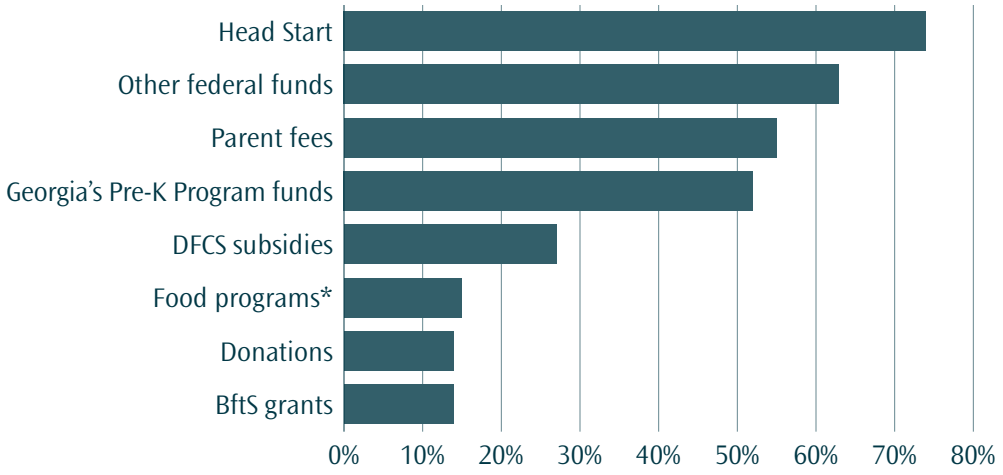
*The CACFP and the Summer Food Service Program

Note. Percentages add up to more than 100% because average percentages are based on those respondents who entered a value greater than zero. Family child care homes are not eligible for Georgia's Pre-K Program funds, Head Start, or other federal funds.

According to Figures 22 and 23, parent fees contributed between 55% and 58% of revenues for those providers who charge fees. For centers, federal funding through Head Start and Early Head Start and other federal programs were major sources of funding for the few centers that received them. For family providers, public funding through DFCS, food programs, and other state funds contributed large percentages of their earnings for those providers who received these types of funding.

Parent Fees. Figure 24 reports the average base rate charged per week for care by provider type and three broad geographic areas. Center providers in the metro Atlanta area have the highest fees for all age ranges, and family providers in rural areas have the lowest fees. For all provider types, fees are higher for younger children. These rates are very similar to those reported in the Georgia 2007 Child Care Market Rate Survey (2007), which is a survey of child care providers conducted by the Division of Family and Children Services (DFCS) annually in order to determine subsidy rates.

Figure 23. Percentage of Center Revenues (if Revenue Type Is Received by Provider)

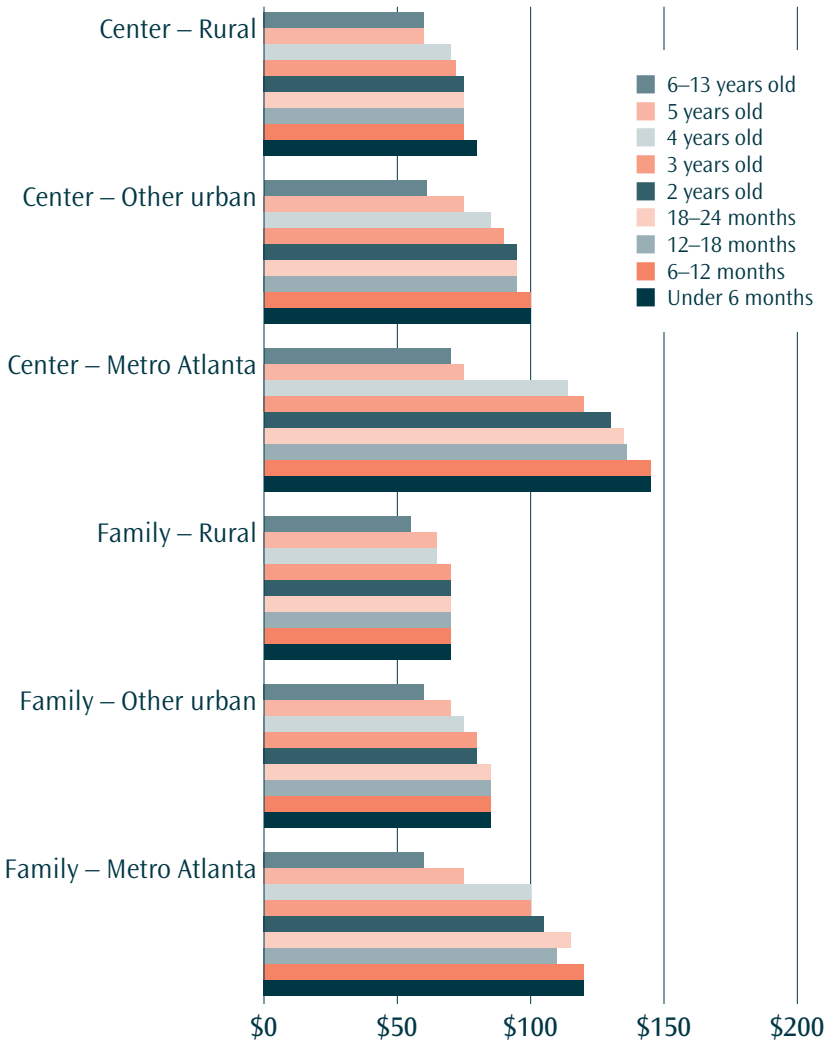


*The CACFP and the Summer Food Service Program

Note. Percentages add up to more than 100% because average percentages are based on those respondents who entered a value greater than zero. The survey did not ask center providers about the receipt of other state funds besides Georgia's Pre-K Program and BftS grants.

While child care costs depend on type of facility, quality of care, hours, and the age of a child, the National Association of Child Care Resource and Referral Agencies (NACCRRA, 2007) provides a benchmark cost for infant and preschool aged child care for various states, including Georgia. According to their data on Georgia, the average annual fees paid for full-time center care for an infant/toddler and a preschooler in 2006 were $6,245 and $5,243, respectively. Full-time care for infants/toddlers and preschoolers in a family child care home was slightly lower at $4,902 and $4,440, respectively. The cost of infant/toddler care was about 9% of the median income of married couple families with children below 18 years, while it was about 29% of the median income of female-headed households.

Figure 24. Median Weekly Parent Fees by Provider Type, Child's Age, & Geographic Area

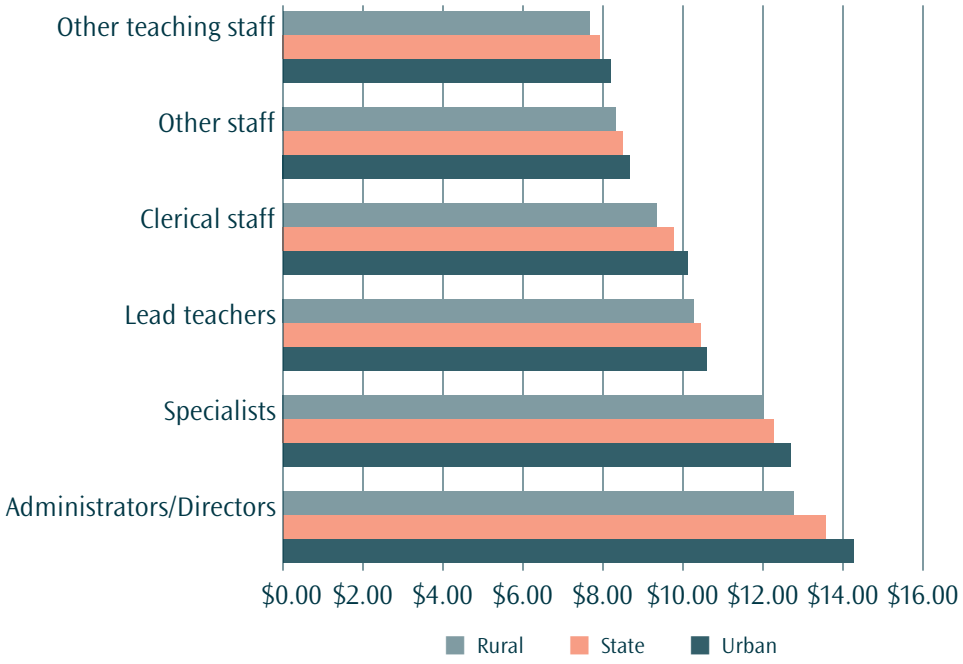


Profiles of the Early Care and Education Workforce in Georgia

Number of Employees. Eighteen percent of family child care home providers report that there are part-time or full-time paid assistant caregivers in their home. Of those, the vast majority of providers only have one assistant (77%). In center-based care, the average number of employees is 12, and the median number is 8. The majority (78%) of staff at centers are lead teachers and other teaching staff. Center staff work full-time for the most part, with the median ranging between 38 and 40 hours per week. Paid assistant caregivers in family child care homes, on the other hand, are hired for 31 hours per week on average.

Of the survey respondents, 73.5% indicated that they were planning to add staff to their business within the next five years. This is consistent with other evidence (Tienda and Mitchell, 2006) that providers believe that the population of children is growing and that their businesses will be responsive to the changing demographics of Georgia.

Figure 25. Hourly Wages for Early Care & Education Providers by Urban Status*



*Urban counties in Georgia are those with populations over 100,000 or central counties for one of the state's metropolitan statistical areas: Fulton, DeKalb, Cobb, Gwinnett, Clayton, Chatham, Richmond, Muscogee, Bibb, Cherokee, Hall, Henry, Houston, Clarke, Dougherty, Lowndes, Floyd, Whitfield, Glynn, and Liberty.

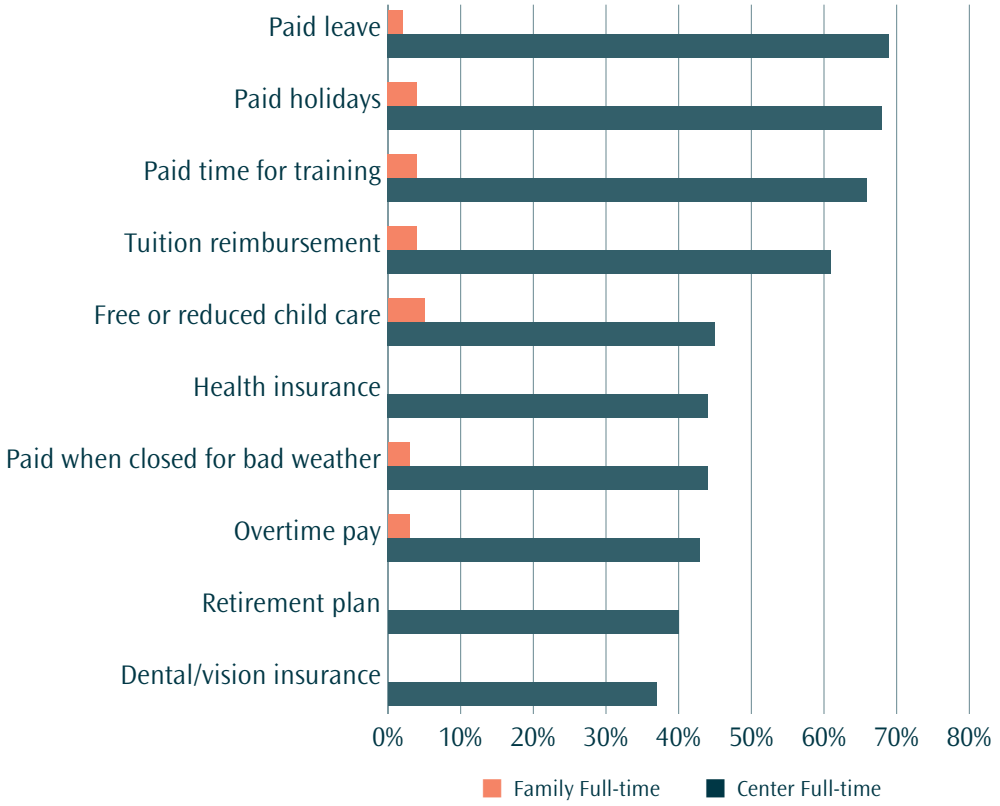
Staff turnover is an often-mentioned concern of this industry because of the impact on children of changing teachers multiple times, especially if temporary substitute teachers are hired until a permanent position is filled. Additionally, the costs involved in training new staff in areas such as curriculum, best practices, and health and safety issues can be difficult and expensive for some members of the industry to provide. A survey question found that 53.8% of providers (not in the public school system) indicated that loss of staff to the public school systems due to increased wage opportunities was an issue for their businesses. Public school systems likely have resources such as greater access to health benefits and in-house staff development opportunities that can attract early care and education providers.

Consistent with this, the survey indicates that 69.2% of centers report that one or more permanent employees have left during the last year; if they have experienced some turnover, the median number of employees reported leaving is two. In addition, 42.5% of centers reported employing seasonal or temporary employees. Of those who do, the average number of temporary employees is four, and the median number is two.

Wages Earned. The average hourly wages received by employees by category and zone is reported in Figure 25. Administrators/directors and specialists have the highest wages, averaging around $13 per hour statewide. Specialists in early care and education settings 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 support the development of children and their families in early care and education settings. The average wage of lead teachers is $10.45 per hour. Wages are slightly higher in urban areas, particularly for administrators/directors.

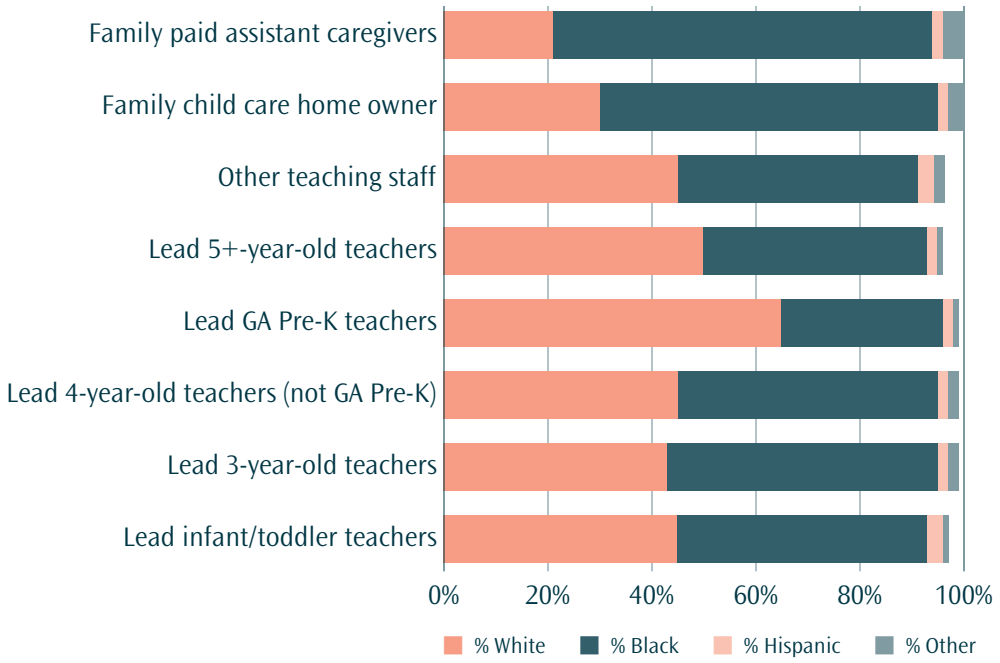
Benefits Offered. Figure 26 provides the percentage of providers who offer full-time staff any of the listed benefits. The majority of centers offer at least some of their full-time staff some or all of a variety of fringe benefits. The most common benefits offered are paid time-off (for holidays, vacation, training) and tuition reimbursement. There is a lot of variation across the state in the types of benefits offered to center staff. Centers located in urban areas are slightly more likely to provide benefits, but there are centers in rural areas which provide generous benefits as well. Very few family child care home providers offer benefits to their paid assistant caregivers, but again, only 18% of family child care homes employ paid assistant caregivers.

Figure 26. Benefits Offered to Early Care & Education Provider Staff



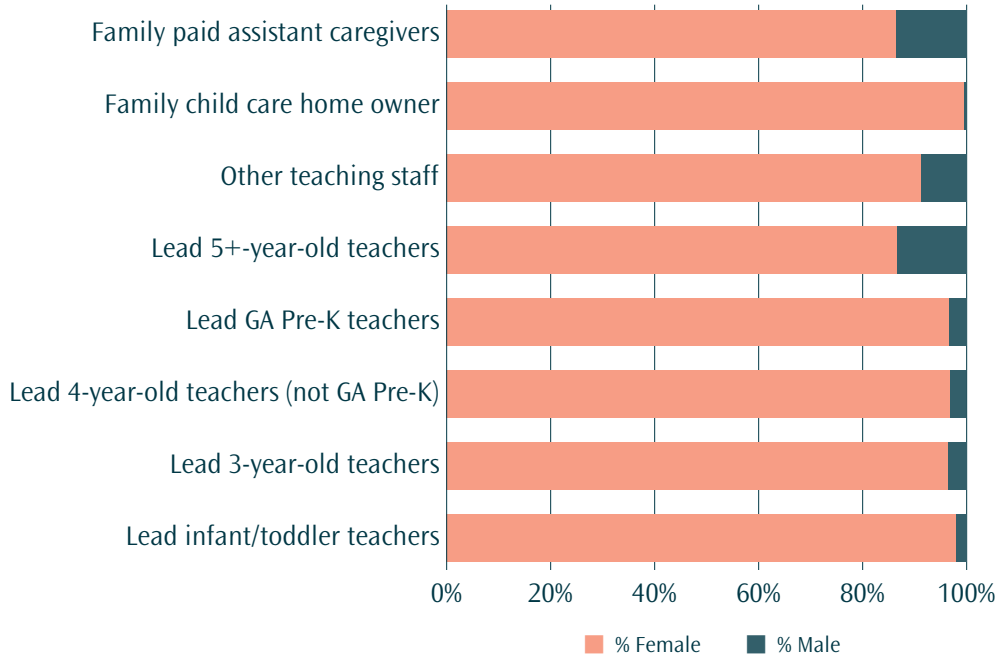
Racial and Gender Composition of Staff. The percentage of family child care home providers who are White, Black, Hispanic, or of some other race/ethnicity are provided in Figure 27 along with the racial/ethnic composition of center teachers displayed by age of children taught.[34] Child care staff are diverse in terms of race; in center care, between 31% and 52% of the teachers are Black, but very few teachers are Hispanic or of some other race/ethnicity. In family child care homes, the majority of owners and paid assistant caregivers are Black.

Figure 27. Racial Composition of Early Care & Education Providers



[34]The percentages do not sum to 100 (except in the first two rows) because some respondents did not fill out the question for all four race/ethnicity categories.

Figure 28. Gender Composition of Early Care & Education Providers



The gender breakdown is presented in Figure 28. In all categories, the vast majority of providers are female. The providers who are most likely to be male are lead teachers for older children (age 5+) and paid assistant caregivers in family child care homes. One possible explanation for this may be that assistant caregivers might often be the husbands/partners of the family child care home owner.

Education of Providers. Due to licensing requirements, no providers should have less than a high school education.[35] However, the survey indicates that a very small percentage of providers fall into this category; 3% of family child care owners and 4% of center teachers. On the other end of the spectrum, the majority of caregivers and teachers have at least some college education. 65% of family child care owners have some education beyond a high school diploma, as do 59% of all center teachers and 50% of paid assistant caregivers.

Nearly a fifth of family child care home owners and paid assistant caregivers have a Certified Child Care Professional (CCCP) credential. Center teachers are very likely to have some kind of specific curriculum training (62%), like Montessori, Creative Curriculum, High/Scope, or WestEd. They are also likely to have a Child Development Associate (CDA) credential (39%) and/or a teaching certificate (36% have a Georgia teaching certificate and 8% have a teaching certificate from another state).

Consistent with these findings, when providers were asked if they required a minimum certification or training credential for their employees, nearly 71% of centers and family child care homes indicated that they did. Of those who provide center-based care, over three quarters (78.2%) of the respondents indicated that they required a minimum credential for their staff members. Among the family child care providers, 54.2% of the sample required a minimum credential for their staff. Moreover, when providers were asked how satisfied they were with the knowledge, skills, and competence of their current staff, slightly over 96% indicated that they were satisfied with the quality of their staff (ranging from somewhat to completely satisfied). Only 3.8% of respondents were not at all satisfied with the quality of their staff. Finally, survey data shows that close to 81% of providers indicated that their staff members were aware of scholarships and incentives programs such as HOPE scholarships, Pell grants, and other financial aid sources to support further study, suggesting that the majority of providers know that opportunities for education exist and that there are financial means to support such endeavors.

[35]Paid assistant caregivers in family child care homes are exempt from this requirement.

Summary of the Early Care and Education Industry Profile

This chapter provided a profile of the early care and education industry in Georgia in terms of both the children currently served and the industry's workforce. Data for this chapter was 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. The profiles provided in this chapter were based on responses from more than 4,700 center-based providers and family child care providers.

Survey data found that most centers and family child care providers in Georgia operate on a 12-month basis. Approximately 40% of family child care providers and 30% of centers offer care on Saturdays, Sundays, and/or holidays. The average weekly parent fee for infants ranges from $70 to $120 for family child care homes and $80 to $145 for centers depending on geographic area. The average wage for administrators in centers is $13.57 per hour, while lead teachers earn an average of $10.45 per hour. In family child care homes, the average hourly wage for paid assistant caregivers is $7.09.

Data provided by the surveys also showed that though the industry serves all races and ethnicities in the state, the percentage of Black children in care represents a larger portion than the proportion of Black children in the state at large. Centers and family child care homes serve children of need with 45% of children in centers and 24% in family child care homes receiving free or reduced-price lunch.

Chapter 7 – Conclusion

This study has shown that the early care and education industry is an important part of Georgia's economy. The industry enables parents to engage in the workforce, allowing them to financially care for their families while contributing federal, state, and local taxes. These taxes, in turn, provide needed goods and services to the population at large. The industry benefits children in terms of cognitive and social development, school readiness, and health and well-being, thereby contributing to the long-term economic development of the state. Finally, as an industry, it generates significant amounts of economic activity on a daily basis.

The primary objective of this report has been to quantify the short-term economic impact of the early care and education industry covering children from infancy to age 13. All forms of licensed and/or regulated care were analyzed. The report estimates that the annual total level of gross receipts is $2.4 billion, which represents the amount of economic activity generated by early care and education providers through their employment of 61,203 teachers, support staff, contractors for specific services, and the like. In turn, those jobs and the money spent by those in the industry provide additional economic activity in the state. The economic models detailed in this report indicate that each dollar spent in the early care and education industry generates an additional $0.70 in the broader state economy and that every 100 jobs in the industry generates an additional 21 jobs throughout the economy. The further economic activity associated with the industry adds another $1.7 billion to Georgia's economy. Thus, the industry generates $4.1 billion of economic activity in the state each year. As part of the economic fabric of Georgia, the early care and education industry may be unparalleled in terms of its support of short- and long-term economic development in the state.

Highlights of the economic impact analysis are as follows:

- The early care and education industry in Georgia provides care for an estimated 383,379 children in the state each year.
- The industry provides 61,203 jobs in the industry itself and generates an additional 12,900 jobs in other industries.
- The industry generates over $4.1 billion of economic activity in the state each year and is on par with industries such as computer and electronic product manufacturing; the arts, entertainment, and recreation industries; and pharmaceutical manufacturing.
- There are over 10,000 licensed for-profit and not-for-profit early care and education centers and family child care homes in Georgia and an additional number of group child care homes, pre-kindergarten programs, military family child care homes, Head Start sites, and military early care and education centers.
- A conservative estimate of the level of parents' annual earnings that are supported by the availability of child care in Georgia is $13.6 billion but may be as high as $32.7 billion.
- Through employment and other spending in the industry, and by fueling expansions in other sectors of the economy, the industry generates $117 million in federal, state, and local tax revenues.

As part of this report, Georgia's Early Care and Education Economic Impact Survey was conducted to supplement existing data about the early care and education industry in Georgia. The data acquired through the responses from 4,748 center-based providers and family child care providers to this survey not only supplied important input for the economic analysis, they also provided important information about the early care and education industry in Georgia. The survey presented a profile of the industry in Georgia, with the following results:

- The industry serves children of all races and ethnicities, but the percentage of Black children in care represents a larger portion than the proportion of Black children in the state at large.
- Centers and family child care homes serve children of need—45% of children in centers and 24% of children in family child care homes receive free or reduced-price lunch.

- Most centers and family child care providers operate on a 12-month basis; 40% of family child care providers and 30% of centers offer care on Saturdays, Sundays, and/or holidays.
- The average weekly parent fee for infants ranges from $70 to $120 for family child care homes and from $80 to $145 for centers, based on geographic area.
- The average wage for administrators in centers is $13.57 per hour; while lead teachers earn an average of $10.45 per hour, and other teaching staff earn, on average, $7.94 per hour. In family child care homes, the average hourly wage for paid assistant caregivers is $7.09. Paid leave, paid holidays, and paid time-off for training are among the benefits most often offered by centers.

This report also provided demographic analyses of population and economic trends in Georgia that indicate that the early care and education industry may face important challenges in the near future. The state's fast growing population and large projected increases in the numbers of young children promise to put pressure on the early care and education industry in the future. The state has a relatively high percentage of single-parent families, and increasing numbers of children with working parents, again increasing the demand for child care. Georgia's population is increasingly diverse, with one of the fastest growing Hispanic populations in the country. This diversity may also call for additional language services in child care and possibly new forms of child care that answer to cultural expectations. Employment in the state is expected to grow, especially in the service sectors (health care and other services) and retail trade. These sectors may involve long and non-traditional work hours, calling for increased flexibility of child care.

The industry itself is a multi-billion dollar industry, and by enabling parents to work, it supports five times as much economic activity in terms of parent wages.

In conclusion, the economic figures cited throughout this report attest to the importance of the early care and education industry as an economic agent in Georgia. The industry itself is a multi-billion dollar industry, and by enabling parents to work, it supports five times as much economic activity in terms of parent wages. On top of these short-term impacts, the industry's primary economic impact is its central focus—preparing children for school and thus affecting the state's long-term economic development through its future workforce. Forward-thinking business leaders are aware of the importance of early education on the future of America's economic success; Daniel Rose, business executive and trustee of the Committee for Economic Development (CED), a business-led public policy research organization, stated in 2006 that "[t]he world's most successful economies are those with the best educated workers. If we can provide quality early education to all American children, we will see returns in our children, our economy, and our society, for years to come." (Dreibelbis and Broman, 2006; pg. 1).

Because the economic impact of the early care and learning industry on the state economy is complex, this report provides families, workers, policy makers, industry administrators, the business community, and Georgia's taxpaying citizens with a clear portrait of the characteristics and contributions this industry makes to the Georgia economy. The findings in this report can provide the evidence needed in a discussion about how best to assist this industry in strengthening the state economy now and in the future. It is difficult to identify an industry that is likely to have similar positive short- and long-term effects on development in the state of Georgia.

Appendix A – Detailed Report of Georgia's Early Care and Education Economic Impact Survey

The body of the *Economic Impact of the Early Care and Education Industry in Georgia* report derived much of its data from Georgia's Early Care and Education Economic Impact Survey, a 2007 survey designed to provide a comprehensive profile of demographic information about Georgia's early care and education industry. This appendix provides a detailed accounting of this survey, including regional breakdowns of the results when possible and the survey methodology. Specifically, this survey report provides detailed profiles of the children served by Georgia's early care and education industry, the operations of these businesses, and the workforce of this industry.

Bright from the Start: Georgia Department of Early Care and Learning contracted with the University of Georgia at Athens (UGA)–Georgia State University (GSU) Child Policy Partnership in 2007 to conduct a survey of all licensed and/or regulated early care and education environments in the state of Georgia. Ultimately the research team decided to write two slightly different versions of the same survey, one geared towards child care centers and the other toward family child care homes. The center version was mailed to 4,498 facilities, which included 3,171 early care and education centers (including those private child care centers that provide Georgia's Pre-Kindergarten Programs), 247 group child care homes, 339 Early Head Start and Head Start sites, 24 military early care and education centers, and 717 Georgia's Pre-Kindergarten Programs in local school systems. The family child care home version of the survey was sent to 5,831 family child care homes and 44 military family child care homes. In total, 4,748 completed surveys were received from Georgia early care and education providers. The combined surveys had a 54.1% response rate, which is higher than the response rates attained by other behavioral surveys conducted in Georgia, which indicate response rates around 40% (CDC, 2007). Data were missing from some providers on individual questions, so response rates for individual questions are noted throughout.

The research team also conducted a sub-study of the non-respondents to the surveys in order to determine if the "hard to reach" centers and family child care homes had statistically significant differences from the initial survey respondents. This sub-study found that for family child care homes on 115 out of 125 items, the two groups showed no statistically significant differences. For those receiving the center version of the survey, the two groups showed no statistically significant differences on 180 out of 214 items. The data cited in this appendix is based on responses to the survey only. Due to the research team's numerous attempts to reach non-respondents and this "hard to reach" sub-study, we feel confident that the data cited reflects current trends in the early care and education industry in Georgia. However, actual percentages could vary slightly from the numbers presented.

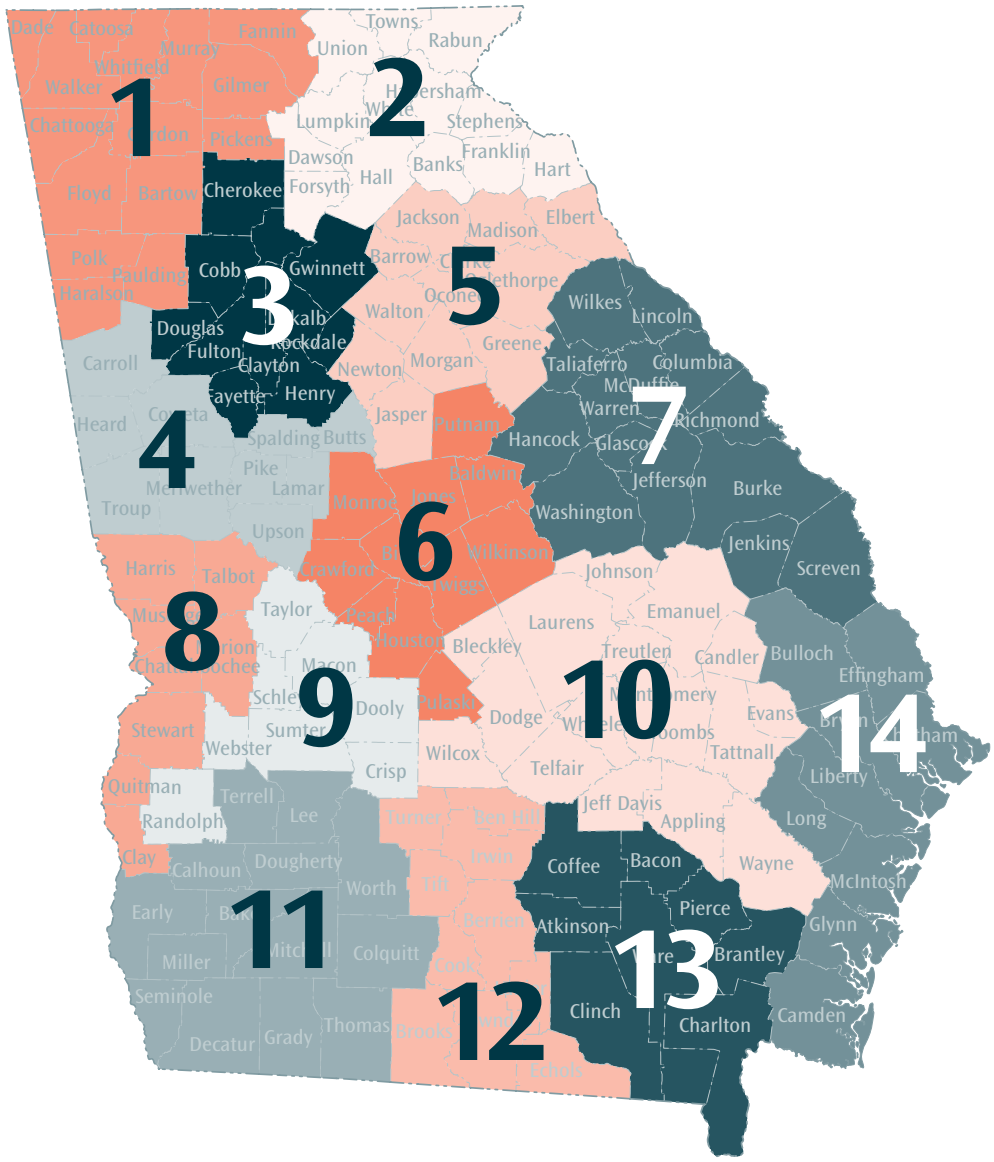
The "Methods" section at the end of this appendix provides detailed information about the development of the surveys, the response rates and attempts to increase the number of respondents, and the similarities and differences between the "hard to reach" centers and family child care homes and the initial survey respondents.

Throughout this report, data are tabled, where appropriate, to indicate center-based and family child care home environments, and by 14 regions in Georgia. These regional boundaries are defined by the counties served by the 14 Child Care Resource and Referral Agencies in Georgia, which are non-profit agencies established in communities to support the development of quality child care in Georgia by working with parents, providers, employers, and the community. Figure 1 presents a map of Georgia identifying the state's 14 Child Care Resource and Referral Regions.

Profiles of the Children Served by Georgia's Early Care and Education Providers

Providers were asked to supply information about the demographics of the children whom they served. This information included the number of children: (1) receiving free or reduced-price lunch, (2) receiving Division of Family and Children's Services (DFCS) subsidies, (3) with identified special needs, (4) receiving services from Babies Can't Wait, and (5) whose first language is not English. Information was also collected on the racial/ethnic demographics of the children served.

Figure 1. Georgia's Child Care Resource and Referral Regions



Numbers of Children Receiving Free or Reduced-Price Meals. Children in early care and education environments may be enrolled in facilities that offer the U.S. Department of Agriculture's Child and Adult Care Food Program and Summer Food Service Program. Families qualify for services based on income eligibility guidelines. Providers were asked to indicate the total number of children in their programs who received these services. On average, 45% of children in center-based care and 24% of children in family child care homes across the state received free or reduced-price lunch. Administrative data supplied by BftS specifically for this report indicate that 50% of children in Georgia public schools receive free or reduced-price lunch. The percentage of children in early care and education environments who received this service was generally less than the state average. Children in center-based care were more likely to receive free or reduced-price lunch than children in

Table 1. Percentage of Children Receiving Free or Reduced-Price Meals by Child Care Resource and Referral Region*

		Family Child Care Homes		Center-Based Care	
		Free	Reduced	Free	Reduced
1	Northwest–Cartersville	17%	1%	42%	8%
2	Northeast–Gainesville	17%	1%	24%	6%
3	Metro Atlanta	25%	2%	32%	7%
4	West Central–Thomaston	16%	2%	34%	9%
5	Northeast–Athens	24%	2%	40%	7%
6	Central–Macon	31%	2%	41%	8%
7	East–Augusta	27%	0%	47%	6%
8	West–Columbus	24%	5%	56%	10%
9	West–Americus	26%	0%	73%	5%
10	East–Swainsboro	29%	3%	54%	10%
11	Southwest–Albany	32%	5%	44%	8%
12	South Central–Tifton	22%	2%	40%	7%
13	South Central–Waycross	8%	6%	58%	6%
14	Southeast–Savannah	21%	3%	42%	9%
	Georgia	22%	2%	38%	7%

*The differences across provider types were statistically significant for both free and reduced-price lunch. South Central–Waycross had a significantly lower percentage of children in family-based care receiving free lunch than the other regions. West–Americus had a significantly higher percentage of children in center-based care receiving free lunch compared to other regions. All other differences by region were not statistically significant.

family child care homes.[1] Data are displayed for each Child Care Resource and Referral area and for both family child care homes and center-based environments in Table 1. 20.9% of survey respondents did not answer the question about free lunch, and 25.4% did not respond to the question about reduced-price lunch.

Number of Children Attending Early Care and Education Environments with Support from DFCS Subsidies. Providers were polled as to the number of children in their early care and education environments who received child care subsidies from the Georgia Division of Family and Children's Services. From their total enrolled population, providers were asked to indicate the number of children receiving such subsidies. For the state as a whole, 18% of children in center-based care and 17% of children in family child care homes received DFCS subsidies.[2] Data are presented in Table 2 by Child Care Resource and Referral and by family child care and center-based options. 22.3% of survey respondents did not respond to this question.

[1]The Georgia 2007 Childcare Market Rate Survey does not provide information in their report about the percentage of *children* receiving free or reduced-priced meals but only the percentage of *providers* that receive funding to provide free or reduced price meals. This characteristic of providers is compared to the Market Rate Survey in the following section of this report.

[2]The Georgia 2007 Childcare Market Rate Survey does not provide information in their report about the percentage of *children* receiving DFCS subsidies, but only the percentage of *providers* that receive these subsidies. This characteristic of providers is compared to the Market Rate Survey in the following section of this report.

Number of Children Diagnosed With Disabilities. Providers were asked to supply a tally of the number of children with diagnosed disabilities in their care. The specific type of disability was not requested, rather, just the confirmation of a diagnosis. Statewide, 4% of children in either type of care and learning environment had a disability. Data are displayed for each Child Care Resource and Referral area and for children in different early care and education environments in Table 3. 21.7% of survey respondents did not respond to this question.

Number of Children Receiving Babies Can't Wait Services. Respondents were asked to tally the number of children in their care who were receiving services from Babies Can't Wait (BCW), Georgia's early intervention provider for children under the age of 3. Respondents were not asked to identify the specific services received from BCW, but rather, whether or not children in their early care and education environments received services. On average, 1.7% of children in family child care homes and 0.8% of children in center-based care in Georgia received services from Babies Can't Wait. According to the BCW annual performance report, 5,383 children in Georgia received their services in 2006-2007 (DHR 2008). The percentage of children served by BCW as indicated by this survey is in line with these official statistics. Data are presented in Table 4 by type of early care and education environment as well as by Child Care Resource and Referral region. 25.1% of survey respondents did not respond to this question.

Table 2. Percentage of Children Receiving DFCS Subsidies by Child Care Resource and Referral Region*

		Family Child Care Homes	Center-Based Care
1	Northwest–Cartersville	10%	13%
2	Northeast–Gainesville	12%	6%
3	Metro Atlanta	12%	15%
4	West Central–Thomaston	15%	21%
5	Northeast–Athens	14%	26%
6	Central–Macon	25%	28%
7	East–Augusta	25%	23%
8	West–Columbus	19%	21%
9	West–Americus	32%	36%
10	East–Swainsboro	26%	30%
11	Southwest–Albany	25%	27%
12	South Central–Tifton	23%	21%
13	South Central–Waycross	9%	21%
14	Southeast–Savannah	20%	19%
	Georgia	17%	18%

*The differences across provider types were not statistically significant. Northeast–Gainesville had a statistically significant lower percentage of children in center-based care receiving subsidies than the other regions. Other differences by region were not statistically significant.

Table 3. Percentage of Children Diagnosed with Disabilities by Child Care Resource and Referral Region*

		Family Child Care Homes	Center-Based Care
1	Northwest–Cartersville	4.9%	5.6%
2	Northeast–Gainesville	4.6%	4.0%
3	Metro Atlanta	4.8%	2.7%
4	West Central–Thomaston	2.4%	4.2%
5	Northeast–Athens	5.3%	4.6%
6	Central–Macon	2.6%	3.4%
7	East–Augusta	3.7%	3.2%
8	West–Columbus	7.0%	4.0%
9	West–Americus	3.0%	5.8%
10	East–Swainsboro	6.4%	4.8%
11	Southwest–Albany	1.6%	3.0%
12	South Central–Tifton	4.0%	4.9%
13	South Central–Waycross	7.5%	3.1%
14	Southeast–Savannah	3.4%	4.7%
	Georgia	4.4%	3.7%

*The differences across regions and provider type were not statistically significant.

Number of Children Whose First Language Was Not English. Providers were asked to supply a profile of the number of children across early care and education environments whose first language was not English. No information was solicited about the specific language spoken. Statewide, for 2.5% of children in family child care homes and for 5.9% of children in center-based care, English was not their first language. According to the U.S. Census in 2000, 10% of individuals in Georgia above age 4 speak a language other than English at home, thus, these rates of ESL are relatively low. There was some variation across regions; in particular, there were relatively high percentages of children whose first language was not English in Northeast–Gainesville center-based care and in Metro Atlanta family-based care. Data are displayed in Table 5 for each Child Care Resource and Referral area and for children in different early care and education environments. 22.8% of survey respondents did not respond to this question.

Racial Composition of Children in Early Care and Education Environments. In addition to providing information about the number of children in family child care homes and center-based environments, providers were asked to provide a breakdown of the number of White, Black, and Hispanic children enrolled.[3] Participants could also code children in an "Other" category if the children did not fall into one of the previous three categories. Across the state, in family-based care, 39% of children whose race/ethnicity was indicated were White,

Table 4. Percentage of Children Receiving Services from Babies Can't Wait by Child Care Resource and Referral Region*

		Family Child Care Homes	Center-Based Care
1	Northwest–Cartersville	1.1%	0.8%
2	Northeast–Gainesville	2.2%	0.4%
3	Metro Atlanta	1.6%	0.7%
4	West Central–Thomaston	1.7%	0.6%
5	Northeast–Athens	1.9%	1.4%
6	Central–Macon	1.0%	1.3%
7	East–Augusta	2.0%	1.0%
8	West–Columbus	1.1%	0.4%
9	West–Americus	0.7%	0.3%
10	East–Swainsboro	2.6%	0.8%
11	Southwest–Albany	0.7%	0.7%
12	South Central–Tifton	3.4%	1.0%
13	South Central–Waycross	2.9%	1.1%
14	Southeast–Savannah	1.6%	1.0%
	Georgia	1.7%	0.8%

*The differences across provider types were statistically significant. South Central–Tifton had a significantly higher percentage of children in family-based care receiving BCW services. Other differences by region were not statistically significant.

Table 5. Percentage of Children Whose First Language Was Not English by Child Care Resource and Referral Region*

		Family Child Care Homes	Center-Based Care
1	Northwest–Cartersville	1.1%	10.6%
2	Northeast–Gainesville	2.8%	13.0%
3	Metro Atlanta	3.5%	7.2%
4	West Central–Thomaston	1.0%	2.1%
5	Northeast–Athens	1.3%	5.9%
6	Central–Macon	2.7%	1.7%
7	East–Augusta	1.3%	1.4%
8	West–Columbus	0.6%	2.0%
9	West–Americus	1.5%	4.2%
10	East–Swainsboro	2.0%	4.0%
11	Southwest–Albany	1.4%	2.9%
12	South Central–Tifton	1.1%	4.6%
13	South Central–Waycross	0.0%	2.2%
14	Southeast–Savannah	1.4%	2.6%
	Georgia	2.5%	5.9%

*The differences across provider type were not statistically significant. Metro Atlanta had a significantly higher percentage of children in family-based care who were ESL, and Northeast–Gainesville had a significantly higher percentage of children in center-based care who were ESL. Other differences by region were not statistically significant.

[3]We adopted the race/ethnicity descriptors used by the federal government here and in the survey instrument itself.

Table 6. Percentage Distribution of Children Enrolled in Family Child Care Homes by Racial/Ethnic Groups Across Georgia & Child Care Resource and Referral Region*

		White	Black	Hispanic	Other
1	Northwest–Cartersville	82%	14%	2%	2%
2	Northeast–Gainesville	74%	20%	3%	4%
3	Metro Atlanta	27%	66%	3%	4%
4	West Central–Thomaston	40%	58%	1%	1%
5	Northeast–Athens	69%	28%	3%	2%
6	Central–Macon	40%	55%	1%	2%
7	East–Augusta	32%	63%	2%	5%
8	West–Columbus	19%	73%	3%	5%
9	West–Americus	32%	66%	0%	2%
10	East–Swainsboro	53%	43%	1%	2%
11	Southwest–Albany	54%	41%	2%	1%
12	South Central–Tifton	47%	49%	5%	2%
13	South Central–Waycross	87%	12%	0%	1%
14	Southeast–Savannah	26%	68%	3%	3%
	Georgia	39%	56%	3%	3%

*The differences by region were not statistically significant.

56% were Black, 3% were Hispanic, and 3% were some other race/ethnicity. In center-based care, 44% were White, 40% were Black, 7% were Hispanic, and 4% were Other. The percentages of White and Black children in particular are very different from the demographics of the state found in Census data, in which 58% of children between birth and age 13 are White and 35% are Black (Census 2000). This disparity may reflect a difference in fertility rates by race and/or a difference in the rates of mothers staying at home with young children by race (Hamilton et al, 2007; Cohany and Sok, 2007).

Tables 6 and 7 display the racial/ethnic breakdown of children across Georgia by Child Care Resource and Referral region for family child care homes and center-based care, respectively. The percentages do not sum to exactly 100% in each row because some respondents did not fill out the question for all four race/ethnicity groups. 14.4% of survey respondents did not provide the number of White children in their care; 15.4% did not provide the number of Black children; 15.6% did not provide the number of Hispanic children; and 16.0% did not provide the number of children with some other race or ethnicity. Since providers may not keep records on the race or ethnicity of the children in their care, some respondents might have left a category blank because they were not sure of the number of children in certain race/ethnicity groups.

Table 7. Percentage Distribution of Children Enrolled in Center-Based Care by Racial/Ethnic Groups Across Georgia and Child Care Resource and Referral Region*

		White	Black	Hispanic	Other
1	Northwest–Cartersville	71%	12%	13%	3%
2	Northeast–Gainesville	74%	9%	13%	5%
3	Metro Atlanta	30%	50%	9%	6%
4	West Central–Thomaston	61%	27%	4%	5%
5	Northeast–Athens	51%	35%	7%	4%
6	Central–Macon	48%	46%	3%	3%
7	East–Augusta	36%	57%	2%	6%
8	West–Columbus	26%	68%	2%	3%
9	West–Americus	29%	63%	4%	4%
10	East–Swainsboro	53%	37%	6%	3%
11	Southwest–Albany	30%	40%	3%	1%
12	South Central–Tifton	55%	33%	6%	3%
13	South Central–Waycross	54%	38%	4%	2%
14	Southeast–Savannah	52%	40%	5%	3%
	Georgia	44%	40%	7%	4%

*The differences by region were statistically significant only for the Hispanic group; Northwest–Cartersville and Northeast–Gainesville had statistically significant higher percentages of Hispanic children in center-based care. The differences across provider type were only significant for the Hispanic and other groups.

There appears to be variation in racial and ethnic diversity across the state and by provider type; the percentages of White range from 19% in family child care homes in West–Columbus to 87% in family child care homes in South Central–Waycross, and the percentages of Black range from 9% in center-based care in Northeast–Gainesville to 73% in family child care homes in West–Columbus. However, the differences by region were not statistically significant with two exceptions: the regional concentration of Hispanic children in center-based care in regions 1 and 2 (Northwest–Cartersville and Northeast–Gainesville) was statistically significant.

Type of Enrollment in Early Care and Education Environments. Finally, providers were asked to provide information on the type of enrollment for children in their early care and education settings. Providers supplied summary information about the number of children in full-time, part-time, before-school, after-school, and wrap-around (i.e., before and after-school) early care and education programs. The vast majority of children were in full-time care (85% of children in center-based care and 83% of children in family child care homes), followed by after-school-only care. Family child care providers had a greater percentage of children in part-time care and before-school care than center-based providers. These data are displayed in Tables 8 and 9 by Child Care Resource and Referral Region for family child care homes and center-based care, respectively. 10.1% of survey respondents did not answer the question about full-time care, 32.2% did not answer the part-time-care question, 35.8% did

Table 8. Percentage of Children by Length of Day Options for Children in Family Child Care Homes by Child Care Resource & Referral Region*

		Full-Time	Part-Time	Before-School	After-School	Wrap-Around
1	Northwest–Cartersville	82%	21%	6%	21%	1%
2	Northeast–Gainesville	83%	18%	7%	17%	3%
3	Metro Atlanta	81%	16%	8%	18%	1%
4	West Central–Thomaston	82%	11%	8%	24%	2%
5	Northeast–Athens	82%	17%	4%	16%	1%
6	Central–Macon	84%	11%	7%	15%	3%
7	East–Augusta	82%	13%	13%	21%	9%
8	West–Columbus	91%	9%	14%	19%	0%
9	West–Americus	82%	17%	12%	24%	4%
10	East–Swainsboro	85%	10%	11%	21%	4%
11	Southwest–Albany	87%	17%	9%	21%	3%
12	South Central–Tifton	85%	7%	6%	20%	5%
13	South Central–Waycross	81%	9%	9%	35%	4%
14	Southeast–Savannah	87%	10%	12%	17%	3%
	Georgia	83%	15%	9%	19%	2%

*West–Columbus had a statistically significant higher percentage of children in full-time care, South Central–Waycross had a significantly higher percentage of children in after-school care, and East–Augusta had a significantly higher percentage of children in wrap-around care. Other differences by region were not statistically significant.

not answer the before-school-care question, 28.0% did not answer the after-school-care question, and 42.3% did not answer the question about wrap-around care.

In sum, the children served by this industry are diverse:

- 45% of children in centers and 24% in family child care homes received free or reduced-price lunch.
- 18% of children in centers and 17% in family child care homes received DFCS subsidies.
- 4% of children in centers and 4% of children in family child care homes had been diagnosed with disabilities.
- Most children in care with disabilities under the age of 3 received services from Babies Can't Wait.
- English was the not the first language for 2.5% of children in family child care homes and 5.9% of children in center-based care.
- The industry serves children of all races and ethnicities, but the percentage of Black children in care represents a larger portion than the proportion of Black children in the state at large.
- 85% of children in centers and 83% of children in family child care homes were in full-time care.

Operations Profiles of Georgia's Center-Based and Family Child Care Home Service Providers

A number of items were posed to the center-based care and family child care providers to assess the operations characteristics of both settings. Questions were posed that collected information on the number of months of program operation, service hours, transportation services, licensed capacity, current enrollment, waiting lists, demographics of children, and number of hours of care for children enrolled in the child care facility.

Table 9. Percentage of Children by Length of Day Options for Children in Center-based Care by Child Care Resource & Referral Region*

		Full-Time	Part-Time	Before-School	After-School	Wrap-Around
1	Northwest–Cartersville	89%	8%	1%	16%	2%
2	Northeast–Gainesville	83%	11%	2%	21%	4%
3	Metro Atlanta	82%	9%	4%	18%	6%
4	West Central–Thomaston	82%	8%	4%	18%	6%
5	Northeast–Athens	85%	12%	2%	15%	3%
6	Central–Macon	90%	5%	6%	14%	5%
7	East–Augusta	85%	6%	6%	17%	7%
8	West–Columbus	81%	12%	6%	17%	3%
9	West–Americus	91%	5%	0%	8%	0%
10	East–Swainsboro	88%	2%	1%	12%	4%
11	Southwest–Albany	92%	2%	1%	11%	2%
12	South Central–Tifton	87%	2%	5%	20%	3%
13	South Central–Waycross	86%	6%	3%	25%	3%
14	Southeast–Savannah	93%	6%	2%	15%	9%
	Georgia	85%	8%	4%	17%	5%

*West–Americus had a statistically significant lower percentage of children in after-school care. Other differences by region were not statistically significant. The differences across provider type were significant for all length-of-day options except wrap-around care.

Months of Program Operation. Early care and education providers noted the number of months early care and education was provided at their respective facilities. Respondents could choose one of three options that included year-round care, nine months of care (school-year only), and three months of care (summer-only care). Data from both center-based care and family child care providers indicated 80.0% of child care facilities were available on a 12-month basis. The majority of the center providers that were open only nine months of the year were Georgia's Pre-Kindergarten Programs in the public school system. Very few providers across Georgia offered care for children exclusively during the summer months. Of those that did, only family child care homes provided summer-only care. The data from this item for both centers and family child care providers are presented in Table 10. 7.0% of providers did not answer this question.

Days and Hours of Program Operation. Providers were polled as to the days in which their centers or homes were open for early care and education services for children and their families. Providers could indicate

Table 10. Months of Program Operations

	12-Months		9-Months		3-Months	
	N	% Within Child Care Option	N	% Within Child Care Option	N	% Within Child Care Option
Center-based care providers	1125	59.8%	757	40.2%	0	0.0%
Family child care providers	2410	95.1%	88	3.5%	37	1.5%
All providers	3535	80.0%	845	19.1%	37	0.8%

Table 11. Days of Program Operation

	Monday-Friday		Saturday		Sunday		Holidays	
	N	% Within Child Care Option	N	% Within Child Care Option	N	% Within Child Care Option	N	% Within Child Care Option
Center-based care providers	1801	91.1%	470	23.8%	461	23.3%	563	28.5%
Family child care providers	2286	82.5%	1143	41.2%	1075	38.8%	1139	41.1%
All providers	4087	86.1%	1613	34.0%	1536	32.4%	1702	35.8%

service hours Monday through Friday, Saturday, Sunday, and holidays. Data from family child care providers suggest that they are more likely than centers (over 40% compared to less than 30%) to provide care for children on Saturdays, Sundays, and holidays. These data suggest that early care and education providers meet the diverse needs of families by providing access to care for a great proportion of each work week and that there appears to be modest attempts at service provision outside of the traditional work week. Data are presented in Table 11 above. Between 2.4% and 4.0% of providers did not respond to these questions (the questions about weekend and holiday care were slightly more likely to be left blank).

The mean number of hours for Monday to Friday, Saturday, Sunday, and holiday hours are presented in Table 12 by provider type. Family child care homes were open significantly longer hours than centers during the work

Table 12. Mean Hours of Program Operation

	Monday-Friday	Saturday	Sunday	Holidays
Center-based care providers	9.8	11.5	12.2	11.4
Family day care providers	11.2	11.2	11.3	11.5
All providers	10.6	11.2	11.4	11.5

Table 13. Transportation Services by Child Care Resource and Referral Region*

		Provided Transportation
1	Northwest–Cartersville	34.8%
2	Northeast–Gainesville	26.8%
3	Metro Atlanta	36.9%
4	West Central–Thomaston	41.1%
5	Northeast–Athens	33.0%
6	Central–Macon	47.7%
7	East–Augusta	43.7%
8	West–Columbus	45.5%
9	West–Americus	25.8%
10	East–Swainsboro	20.5%
11	Southwest–Albany	43.5%
12	South Central–Tifton	29.5%
13	South Central–Waycross	31.0%
14	Southeast–Savannah	33.8%
	Georgia	36.3%

*The differences by region were statistically significant. The East–Swainsboro, West–Americus, South Central–Tifton, and Northeast–Gainesville regions of the state had statistically significant lower percentages of providers who offered transportation services.

week, but the differences in hours for the weekends or holidays were not statistically significant. Overall, providers were open 10 to 11 hours on average on the days that they were open.

Transportation. Early care and education providers were surveyed about transportation services that may be provided to children and families. While some early care and education programs in Georgia may be more likely to provide transportation services for children (e.g., Head Start programs, providers who care for after-school children), there are also very stringent regulations for transportation services. Transportation services by early care and education providers signal a responsiveness of providers to meeting the needs of children and families. For those providers who indicated that they transported children (36.3%), transportation services were more likely to be provided by centers than by family child care homes; 60.3% of centers provided transportation whereas only 18.8% of family child care homes reported providing transportation. If all Pre-Kindergarten Programs are excluded (since these programs are very likely to have transportation) only 36.3% of center-based providers offered transportation. There is some variation across regions; providers in rural areas were less likely to offer transportation: 37.8% of providers in large urban areas of the state and 33.4% of providers in rural areas offered transportation. More specifically, providers in the East–Swainsboro, West–Americus, South Central–Tifton, and Northeast–Gainesville regions of the state were less likely to offer transportation services than other regions of the state. Transportation services provision by the 14 Child Care Resource and Referral regions are summarized in Table 13. 5.5% of survey respondents did not respond to this item.

Table 14. Current Enrollments in Early Care and Education Settings by Child Care Resource and Referral Region*

		Family Child Care Homes		Center-Based Care	
		Mean	Range	Mean	Range
1	Northwest–Cartersville	5.86	1-12	72.60	8-380
2	Northeast–Gainesville	5.84	1-12	79.60	5-283
3	Metro Atlanta	5.21	1-12	81.86	2-368
4	West Central–Thomaston	6.30	3-12	67.66	5-300
5	Northeast–Athens	5.51	1-10	58.66	5-295
6	Central–Macon	5.88	2-12	72.28	6-330
7	East–Augusta	5.78	1-12	55.11	8-240
8	West–Columbus	5.02	1-11	92.57	13-321
9	West–Americus	5.75	1-10	74.17	6-362
10	East–Swainsboro	5.75	1-12	56.06	7-140
11	Southwest–Albany	5.82	1-12	99.35	10-475
12	South Central–Tifton	5.63	1-10	60.44	6-220
13	South Central–Waycross	6.30	3-8	52.47	8-180
14	Southeast–Savannah	5.33	1-12	62.50	5-360
	Georgia	5.47	1-12	73.05	2-475

*No significant regional differences in enrollments were found for family child care homes. Among center-based providers, the Northwest–Cartersville, West Central–Thomaston, Northeast–Athens, Central–Macon, East–Augusta, East–Swainsboro, South Central–Tifton, South Central–Waycross, and Southeast–Savannah regions had current enrollments that were statistically significantly lower than the other regions in the state.

Licensed Capacity and Current Enrollment. Center providers were asked to provide their licensed capacity and their current enrollment. Family providers were only asked for current enrollment because the maximum licensed capacity for family child care homes in Georgia is six children. Table 14 displays the enrollments in center-based care and family child care settings by Child Care Resource and Referral region. Tables 15 and 16 show the breakdown of the average number of enrolled children by child's age and region for center providers and family providers, respectively.[4] 10.0% of survey respondents did not answer this question.

[4]The average enrollments by age (reported in Tables 15 and 16) do not sum to the average total enrollment (reported in Table 14) primarily because fewer providers responded to the detailed age-specific enrollment questions than the total current enrollment question, thus the samples are slightly different.

Table 15. Average Number of Enrolled Children in Center-Based Care by Child's Age & Child Care Resource and Referral Region*

		<6 mos	6-12 mos	12-18 mos	18-24 mos	2 yrs	3 yrs	4 yrs	5 yrs	6-13 yrs
1	Northwest–Cartersville	1.2	2.0	2.4	2.8	3.8	8.1	20.3	6.4	4.7
2	Northeast–Gainesville	4.1	5.3	6.0	6.4	9.2	21.0	19.6	11.3	11.5
3	Metro Atlanta	3.5	4.3	5.4	5.7	8.4	12.2	19.0	21.6	15.2
4	West Central–Thomaston	2.0	2.3	3.3	3.9	7.3	8.1	19.1	6.0	10.2
5	Northeast–Athens	1.5	2.1	3.0	2.3	5.0	8.0	17.7	6.1	5.9
6	Central–Macon	1.5	2.3	3.5	3.3	6.2	12.0	28.2	5.3	6.8
7	East–Augusta	2.3	3.6	4.1	4.6	5.7	9.2	17.1	6.7	8.9
8	West–Columbus	2.2	2.7	3.4	3.0	6.9	13.5	19.0	7.7	12.3
9	West–Americus	1.3	2.2	2.3	2.8	6.2	5.3	11.2	5.3	4.6
10	East–Swainsboro	1.3	2.5	3.3	2.2	7.1	8.8	17.1	5.4	5.5
11	Southwest–Albany	1.7	2.6	2.9	3.7	5.5	13.9	26.2	16.1	35.6
12	South Central–Tifton	1.3	2.2	2.4	3.5	5.2	7.2	21.4	4.7	7.8
13	South Central–Waycross	2.4	2.8	6.1	6.8	8.9	12.2	11.9	5.7	5.9
14	Southeast–Savannah	1.4	2.1	2.7	3.4	5.0	8.8	12.5	8.9	6.5
	Georgia	2.3	3.1	4.0	4.3	6.7	11.0	19.1	12.2	11.6

*Among center-based providers a statistically significant difference in age-specific enrollments was found among the resource and referral regions of the state for all age groups except the two infant categories.

Table 16. Average Number of Enrolled Children in Family Child Care Homes by Child's Age & Child Care Resource and Referral Region*

		<6 mos	6-12 mos	12-18 mos	18-24 mos	2 yrs	3 yrs	4 yrs	5 yrs	6-13 yrs
1	Northwest–Cartersville	0.4	0.8	0.9	1.0	1.4	1.4	1.2	0.5	1.5
2	Northeast–Gainesville	0.4	1.0	1.0	1.1	1.7	1.3	1.1	0.7	1.2
3	Metro Atlanta	0.5	0.8	1.0	0.9	1.4	1.2	0.9	0.5	1.2
4	West Central–Thomaston	0.5	1.0	0.9	0.9	1.8	1.3	1.0	0.6	1.5
5	Northeast–Athens	0.4	0.7	0.8	1.0	1.6	1.6	1.1	0.6	1.3
6	Central–Macon	0.5	0.7	1.1	1.0	1.7	1.4	1.0	0.8	1.4
7	East–Augusta	0.6	0.9	0.9	0.8	1.4	1.2	1.1	0.6	1.5
8	West–Columbus	0.4	0.7	0.8	0.9	1.3	0.9	0.6	0.4	1.1
9	West–Americus	0.6	0.7	0.9	0.9	1.5	1.3	1.1	0.7	1.5
10	East–Swainsboro	0.7	0.9	0.8	1.0	1.4	1.6	1.1	0.8	1.6
11	Southwest–Albany	0.4	0.7	1.0	1.0	1.6	1.5	1.2	0.5	1.4
12	South Central–Tifton	0.5	0.6	1.1	1.0	1.6	1.5	1.0	0.6	1.3
13	South Central–Waycross	0.5	0.8	0.7	0.8	1.4	1.7	1.1	0.5	1.9
14	Southeast–Savannah	1.1	1.2	1.3	1.5	1.9	1.8	1.2	0.8	1.2
	Georgia	0.6	0.8	1.0	1.0	1.5	1.4	1.0	0.6	1.3

* Among family child care homes, the only statistically significant difference across regions was found for the five year old group.

The average licensed capacity reported by center providers was 99.8 children; the median was 84. The average number currently enrolled was 73.1; the median enrollment was 55 children. The difference between capacity and enrollment does not necessarily represent excess capacity because some providers may choose not to care for as many children as they are legally permitted. Accreditation requires lower enrollments than licensed capacity, and some providers may voluntarily choose lower enrollments to ensure quality care. This is supported by the finding below that 62% of providers in the state had a waiting list.

Family providers reported having on average 5.5 children and a median of six children. Although state regulations do not allow family child care homes to receive payment for more than six children, the providers who report more than six children are not necessarily violating the ratio guidelines; providers may care for children for whom they do not receive payment, such as children of relatives or friends. Although providers were asked not to include these children in their enrollments, some may have done so. Also, some providers may offer part-time care options for families in which multiple children share a child care slot.

Waiting Lists. Providers were asked to supply the number of children that were on a waiting list for early care and education services. The mean number of children on waiting lists across the state for centers was 16.50 and 2.43 for family child care homes. Note that waiting lists are not a perfect indicator of excess demand because many parents put their children on multiple waiting lists, and a provider might have a waiting list for infants but several available slots for other age groups, for instance. Table 17 provides a summary of the number of children on waiting lists along with the minimum and maximum wait list numbers in each region. Within center-based and family child care homes, there were no significant differences in mean number of children on waiting lists. 51.2% of respondents did not answer this question.

Table 17. Percentage With a Waiting List & Numbers of Wait Listed Children by Child Care Resource & Referral Region*

		Family Child Care Homes			Center-Based Care		
		%	Mean	Range	%	Mean	Range
1	Northwest–Cartersville	66%	2.59	0-10	82%	17.51	0-113
2	Northeast–Gainesville	64%	2.81	0-30	73%	10.36	0-85
3	Metro Atlanta	50%	1.74	0-83	61%	23.79	0-385
4	West Central–Thomaston	64%	2.71	0-10	63%	11.27	0-105
5	Northeast–Athens	60%	3.27	0-65	56%	17.71	0-230
6	Central–Macon	64%	3.59	0-45	81%	12.77	0-102
7	East–Augusta	68%	3.32	0-30	60%	9.82	0-94
8	West–Columbus	46%	1.71	0-12	42%	8.53	0-60
9	West–Americus	59%	2.00	0-15	83%	13.33	0-83
10	East–Swainsboro	81%	3.89	0-15	72%	14.49	0-94
11	Southwest–Albany	68%	2.49	0-10	70%	16.99	0-210
12	South Central–Tifton	69%	4.31	0-35	65%	8.06	0-45
13	South Central–Waycross	62%	2.54	0-8	81%	13.83	0-79
14	Southeast–Savannah	58%	2.39	0-25	70%	13.04	0-106
	Georgia	58%	2.43	0-83	67%	16.50	0-385

*None of the differences by region were statistically significant.

Table 18. Median Annual Revenues per Enrolled Child by Provider Type & Child Care Resource & Referral Region*

			Center-Based Care			
		Family Child Care Homes	All	Without Head Start or Georgia's Pre-K	For Profit	Not For Profit
1	Northwest–Cartersville	$2,667	$3,654	$3,057	$3,860	$3,336
2	Northeast–Gainesville	$3,253	$3,969	$3,235	$2,835	$4,304
3	Metro Atlanta	$3,200	$4,109	$3,222	$4,007	$4,286
4	West Central–Thomaston	$2,553	$3,866	$2,721	$4,300	$3,046
5	Northeast–Athens	$2,566	$3,494	$2,994	$3,719	$3,253
6	Central–Macon	$2,354	$3,994	$3,337	$3,994	$4,029
7	East–Augusta	$2,635	$2,768	$2,498	$3,074	$2,705
8	West–Columbus	$2,500	$4,094	$2,408	$3,836	$4,245
9	West–Americus	$2,595	$3,807	$3,807	$4,160	$3,743
10	East–Swainsboro	$2,446	$3,134	$2,594	$4,141	$2,594
11	Southwest–Albany	$2,079	$2,917	$2,537	$2,138	$3,028
12	South Central–Tifton	$2,202	$3,261	$2,231	$3,893	$2,308
13	South Central–Waycross	$2,383	$6,485	$2,707	$6,903	$2,960
14	Southeast–Savannah	$2,268	$3,643	$3,563	$3,984	$3,625
	Georgia	$2,750	$3,842	$2,860	$4,007	$3,515

*The difference across regions was statistically significant for family child care homes, but not for any of the centers. In particular, the family child care home incomes per child were significantly higher in Metro Atlanta.

Annual Revenues of Providers in 2006. Family child care home providers and center providers were asked to report their gross annual revenues (income before taxes and expenses) in 2006. The median responses per enrolled child for family and center providers are reported in the first two columns of Table 18 by region. We also report the median annual revenues per child for three subsets of center providers. Because of state and/or federal requirements and the additional services provided in Early Head Start, Head Start, and Georgia's Pre-K Programs, the state and federal funds provided to these programs are greater per child than those for the average early care and education program. For this reason, data are presented with those specialized programs removed. We also report revenues per child for for-profit centers and for not-for-profit centers. 44% of centers reporting were for-profit businesses. 38.4% of providers did not respond to the revenue question.

Across Georgia, the median annual gross revenues per child were $2,750 for a family provider, and the median annual revenues per child were $3,842 for a center-based provider. For center providers that did not offer Georgia's Pre-K or Head Start programs, the median annual revenues per child were $2,860. Thus, the revenues per child for family providers were only about one hundred dollars lower than the median annual revenues per child for a center that does not provide specialized programs. The median revenue for all centers was more than $1,100 greater than that of family providers. Finally, the median revenues per child for for-profit centers is $4,007 where the median revenues per child for not-for-profit centers is about $500 less at $3,515. The difference across regions was statistically significant for family child care homes but not for any of the centers.

These annual revenues per child were lower than the sum of the parent fees over an entire year. For example, in the Metro Atlanta region, center-based care ranges between $70 and $145 per week on average depending on the age of the child, but $4,109 amounts to only $79 per week for 52 weeks. However, included in these revenues are providers who did not collect parent fees and providers who did not provide care year-round.

The total annual revenues for providers varied greatly. The distributions of revenues provided are not reported by region because in some regions, the number of providers reporting revenues/income in a given bracket is small.

The average gross annual revenues for family child care homes were $20,774, with a median of $14,000. The average total net annual revenues for family child care homes were $9,742, with a median of $6,000. The distribution of gross and net revenues for family providers is shown in Table 19.

The average annual revenues for centers were $533,502, with a median of $117,350. The distribution of revenues for centers is provided in Table 20. Note that the highest revenue generating respondents may actually represent multiple sites, as some center providers with multiple sites were not able to separate their financial information by individual site and did not indicate this on the survey. Many multiple-site providers had this issue and did indicate that they provided one figure to cover all of their sites. When this occurred, the survey team divided this figure by the number of sites and assigned this average to each of their sites.

Respondents were asked to report whether they received revenues from a list of revenue sources and, if so, to provide the annual amount of funding. The percentage of providers receiving any funding from that source is reported in Table 21 by provider type. The percentage that each revenue source contributed to their overall budget, given that they received any revenue from that source, is reported in Table 22 for family child care homes and centers.

According to Table 22, parent fees contributed between 55% and 58% of revenues for those providers who charge fees. For centers, federal funding through Head Start and Early Head Start and other federal funds were major sources of financial support for the 9% and 4% of centers, respectively, that received them. For family providers, public funding through DFCS, food programs, and other state funds contributed large percentages of their revenues, for those providers that received these types of funding.

Table 19. Distribution of Revenues Received by Family Child Care Homes

Dollar Amount	Gross Annual Revenues	Net Annual Revenues
$5,000 or less	25.4%	47.0%
$5,001 to $11,000	16.4%	23.0%
$11,001 to $17,000	16.7%	15.5%
$17,001 to $23,000	15.8%	7.9%
$23,001 to $29,000	11.8%	3.6%
More than $29,000	14.0%	3.0%

Table 20. Distribution of Revenues Received by Center-Based Care Providers

Dollar Amount	Annual Revenues
$29,000 or less	9.8%
$29,001 to $100,000	22.7%
$100,001 to $250,000	25.7%
$250,001 to $500,000	22.3%
$500,001 to $1,000,000	14.1%
More than $1,000,000	5.4%

Table 21. Percentage of Providers Receiving Program Revenues by Provider Type

	Family	Center
Parent fees	56%	65%
Div. of Family & Children Services subsidies	28%	58%
Georgia Lottery for Education/ Georgia's Pre-K	N/A	48%
Bright from the Start grant or mini-grant	4%	10%
Food programs*	63%	50%
(Early) Head Start	N/A	9%
Other federal funds	N/A	4%
State funds	2%	N/A
United Way & other charitable donations	1%	12%

*The Child and Adult Care Food Program and the Summer Food Services Program.

Table 22. Percentage of Revenues (if Revenue Type Was Received by Provider) by Provider Type

	Family[1]	Center[1]
Parent fees	58%	55%
Div of Family & Children Services subsidies	38%	27%
Georgia Lottery for Education/ Georgia's Pre-K	N/A	52%
Bright from the Start grant or mini-grant	24%	14%
Food programs*	36%	15%
(Early) Head Start	N/A	74%
Other federal funds	N/A	63%
State funds	40%	N/A
United Way & other charitable donations	19%	14%

*The Child and Adult Care Food Program and the Summer Food Services Program.

[1]Percentages add up to more than 100% because average percentages are based on those respondents who entered a value greater than zero.

Comparisons With the 2007 Childcare Market Rate Survey. In 2007 the Georgia Department of Human Resources conducted the Childcare Market Rate Survey (2007). This survey is conducted periodically to determine variations in market rates among child care providers in different areas of the state in order to meet federal requirements under the Child Care and Development Fund program. The results of the survey are used to determine state reimbursement rates to providers who qualify for state subsidies. Similar surveys have been conducted periodically since 1991.

It is useful to compare the results from the Market Rate Survey to the results from this survey, where possible, to validate some of the findings. The Market Rate Survey only reports information for three geographic zones: Metro Atlanta, other urban and suburban areas, and rural areas across the state, not for the state as a whole. Thus, the data from this survey are broken down to make these comparisons and are presented in Table 23. Additionally, the Market Rate Survey has a narrower definition of center providers than in this report so, for comparability, group child care homes, military centers, and Georgia's Pre-K Programs in local public schools were excluded from the center provider category, and military family-based providers were excluded from the family provider category for Table 23 only.

The comparisons that can be made are: (1) the percentage of providers, both family-based and center-based, that received DFCS subsidies, although the Market Rate Survey asks a slightly different question (whether the provider received money from the state for the care of children), (2) the percentage of center-based providers that received state money for Georgia's Pre-K Programs, (3) the percentage of center-based and family-based providers that received

Table 23. Comparisons to the 2007 Childcare Market Rate Survey by Geographic Area

	Economic Impact Survey			Market Rate Survey		
	Metro Atlanta	Other Urban	Rural	Metro Atlanta	Other Urban	Rural
(DFCS) Subsidies for care of children received by family-based providers*	22%	30%	36%	27%	45%	45%
(DFCS) Subsidies for care of children received by center-based providers*	79%	70%	68%	70%	75%	79%
Georgia Lottery for Education/Georgia's Pre-K	53%	39%	27%	61%	43%	23%
Food program funds received by family-based providers*	58%	66%	70%	70%	74%	75%
Food program funds received by center-based providers*	53%	61%	66%	46%	65%	71%
(Early) Head Start	6%	8%	16%	4%	7%	8%

*The 2007 Childcare Market Rate Survey has a narrower definition of center providers than in this report. For comparability, group child care homes, military child care centers, and Georgia's Pre-K Programs in local public schools were excluded from the center-based provider category for this table only. Military family child care homes were excluded from the family-based provider category for this table only.

Table 24. Median Weekly Parent Fees by Provider Type, Child's Age, and Geographic Area

	Family Child Care Homes			Center-Based Care		
	Metro Atlanta	Other Urban	Rural	Metro Atlanta	Other Urban	Rural
Under 6 months	$120	$85	$70	$145	$100	$80
6-12 months	120	85	70	145	100	75
12-18 months	110	85	70	136	95	75
18-24 months	115	85	70	135	95	75
2 years old	105	80	70	130	95	75
3 years old	100	80	70	120	90	72
4 years old	100	75	65	114	85	70
5 years old	75	70	65	75	75	60
6-13 years old	60	60	55	70	61	60

funds for feeding children in their care, and (4) the percentage of center-based providers that received funding for Head Start and Early Head Start programs. The differences, if any, are small, but it appears that a smaller percentage of providers (except for centers in the Metro Atlanta area) reported receiving DFCS subsidies, a smaller percentage of family-based providers reported receiving food program funds, and a larger percentage of centers in rural areas reported receiving funds for Head Start or Early Head Start programs in this survey. However, in general, it appears that the findings from this survey are very close to those from the Market Rate Survey.

Parent Fees. Respondents were asked about the weekly base rates per child charged to parents by the age of the child. Table 24 reports these figures by provider type and three broad geographic areas. Center providers in the Metro Atlanta area had the highest fees for all age ranges, and family providers in rural areas had the lowest fees. For all provider types, fees were higher for younger children.

These rates are very similar to those reported in the 2007 Childcare Market Rate Survey. Comparing center-based infant care (12 months and younger), data from the current survey indicated that the median weekly rate charged in the Metro Atlanta area was $145, whereas the Market Rate Survey found that the median was $149.50 in this region.[5] The reported median fee for infants in center-based care was $80 in rural areas for both this survey and the Market Rate Survey. Comparing family-based infant care, this survey found that the median weekly rate in the Metro Atlanta area is $120, whereas the Market Rate Survey found that the median was $125 in this region. Finally, both this survey and the Market Rate Survey found a median of $70 in rural areas for family-based infant care.

Summary of provider characteristics:

- Most centers and family child care providers operated on a 12-month basis; 40% of family child care providers and 30% of centers offered care on Saturdays, Sundays, and/or holidays.
- The median annual revenues per enrolled child in family child care homes was $2,750 and in center-based care (not including Head Start or Georgia's Pre-K Programs) was $2,860.
- The average weekly parent fee for infants ranged from $70 to $120 for family child care homes and from $80 to $145 for centers, based on geographic area.
- Among those providers that received any parent fees, parent fees accounted for between 55% and 58% of total revenues; the rest came from state and federal funds, and charitable donations.

[5]Note that the Market Rate Survey excludes group child care homes from their center-based provider category, but these providers are categorized as centers in this survey.

Profiles of the Early Care and Education Workforce in Georgia

Providers were asked to supply information about the demographics of the workforce of the early care and education industry. This information included: (1) the number of employees, (2) their hours worked, (3) their wages, (4) the benefits offered to them, (5) their racial and ethnic composition, and (6) their education and credentials. Data are provided separately, where appropriate, for center-based and family child care home environments.

Number of Employees. Eighteen percent of family child care home providers reported that there were part-time or full-time paid assistant caregivers in their home. Of those, the vast majority of providers only had one assistant (77%). 15.8% of family respondents did not answer this question.

Table 25. Percentage of Staff by Position Type in Center-Based Care

	Percentage of staff in category
Administrators/Directors	11%
Lead teachers	38%
Other teaching staff	40%
Specialists	2%
Clerical staff	2%
Auxiliary staff	7%

In center-based care, the average number of employees was 12, and the median number was 8. The majority (78%) of staff at centers were lead teachers and other teaching staff, as shown in Table 25. The percentage of other teaching staff was roughly the same as the percentage of staff who were lead teachers. This suggests that centers were adhering to state regulations with regard to adult-to-child ratios in care settings for children birth to age 5. For example, the state requires that in each state-supported Georgia's Pre-Kindergarten classroom there is one lead teacher and one assistant teacher. There are also federal adult-to-child ratio regulations that may be relevant for federal programs like Early Head Start, which mandates an adult to child ratio of 1:4. 21.9% of center respondents did not fill in the number of employees by position type.

In a separate question, 73.5% of respondents indicated that they were planning to add staff to their business within the next five years. This is consistent with other evidence (Tienda and Mitchell, 2006) that providers believe that the population of children is growing, and that their businesses will be responsive to the changing demographics of Georgia.

Staff turnover is an often-mentioned concern of this industry because of the impact on children of changing teachers multiple times, especially if temporary substitute teachers are hired until a permanent position is filled. Additionally, turnover can be costly for child care facilities because of the costs involved in training new staff in areas such as curriculum, best practices, and health and safety issues. A survey question found that 53.8% of providers (not in the public school system) indicated that loss of staff to the public school systems due to increased wage opportunities was an issue for their business.

Consistent with this, the survey indicates that 69.2% of centers reported that one or more permanent employees had left during the previous year; if they had experienced some turnover, the median number of employees who had left was two. In addition, 42.5% of centers reported employing seasonal or temporary employees. Of those who did, the average number of temporary employees was four, and the median number was two. There appears to be less turnover among family child care home assistants when compared to staff in center-based care. 21.6% of family home providers reported that one or more paid assistant caregivers had left during the previous year, not including temporary or seasonal staff. The lower turnover rate is likely due to the fact that only 18% of family child care homes employed any permanent paid assistant caregivers.

A full 43.4% of center respondents and 75.9% of family respondents did not answer the question about staff turnover. Providers may have left this question blank instead of indicating that they had no staff turnover, and many of the family child care home providers may have left the question blank because they had never employed a paid assistant caregiver. 57.5% of center respondents did not answer the question about seasonal and temporary staff. Again, many may have left this question blank because they had never employed this type of staff.

Table 26. Number of Hours Worked by Early Care & Education Providers

		Mean Hours	Median Hours
Center-based care	Administrators/Directors	41	40
	Lead teachers	37	40
	Other teaching staff	34	40
	Specialists	34	40
	Clerical staff	35	40
	Auxiliary staff	32	38
Family child care homes	Paid assistant caregivers	31	36

Hours Worked. The average and median number of hours worked by all types of employees is reported in Table 26. Center staff worked full-time for the most part, with the median ranging between 38 and 40 hours per week. Paid assistant caregivers in family child care homes, on the other hand, were hired for 31 hours per week on average. 20.7% of center respondents did not answer the question about hours for administrative staff; 9.5% did not answer for lead teachers; 7.7% did not answer for other teaching staff; and 8.5% did not answer for auxiliary staff. All center respondents with specialists and clerical staff responded to the hours question. 11.6% of family providers with paid assistant caregivers did not answer the hours question.

Wages Earned. The average hourly wages received by employees by category, urbanicity, and profit status of the provider is reported in Table 27. Administrators/directors and specialists had the highest wages, averaging around $13 per hour statewide. Specialists in early care and education settings typically have unique skills 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 support the development of children and their families in early care and education settings. The average wage of lead teachers was $10.45 per hour. Wages were slightly higher in urban areas, particularly for administrators/directors. Wages paid by center

Table 27. Hourly Wages for Early Care & Education Providers by Urban Status* & Profit Status

		State Mean	Urban Mean	Rural Mean	For Profit Mean	Not for Profit Mean
Center-based care	Administrators/Directors	$13.57	$14.27	$12.77	$10.98	$17.61
	Lead teachers	$10.45	$10.60	$10.28	$8.69	$12.83
	Other teaching staff	$7.94	$8.20	$7.67	$7.32	$8.73
	Specialists	$12.29	$12.70	$11.98	$9.92	$13.86
	Clerical staff	$9.79	$10.12	$9.35	$8.51	$10.66
	Auxiliary staff	$8.51	$8.69	$8.33	$8.08	$9.13
Family child care homes	Paid assistant caregivers	$7.09	$7.25	$6.73	N/A	N/A

*Urban counties in Georgia are defined as those with populations over 100,000 or central counties for one of the state's metropolitan statistical areas: Fulton, DeKalb, Cobb, Gwinnett, Clayton, Chatham, Richmond, Muscogee, Bibb, Cherokee, Hall, Henry, Houston, Clarke, Dougherty, Lowndes, Floyd, Whitfield, Glynn, and Liberty.

Table 28. Benefits Offered to Early Care & Education Staff, by Provider Type & Employment Status

	Center-Based Care		Family Child Care Home	
	Full-Time	Part-Time	Full-Time	Part-Time
Free or reduced-price child care	45%	23%	5%	4%
Paid holidays	68%	17%	4%	2%
Paid time for training	66%	28%	4%	4%
Tuition reimbursement	61%	26%	4%	3%
Paid when closed for bad weather	44%	12%	3%	2%
Paid leave	69%	18%	2%	1%
Health insurance	44%	9%	0%	0%
Dental/vision insurance	37%	7%	0%	0%
Retirement plan	40%	7%	0%	0%
Overtime pay	43%	17%	3%	2%

providers are also higher for all categories when the center is a not-for-profit. Between 32.9% and 41.2% of center respondents did not answer the questions about wages, depending on the position category (the lowest response rate was for administrative positions and the highest was for specialists). 38.1% of family providers with paid assistant caregivers did not answer the question about wages received by their paid assistant caregivers.

Benefits Offered. Table 28 provides the percentage of providers who offered full-time staff or part-time staff any of the listed benefits. The majority of centers offered at least some of their full-time staff some or all of a variety of fringe benefits. The most common benefits offered were paid time-off (for holidays, vacation, training) and tuition reimbursement. Some part-time staff members in centers also were offered benefits. There was a lot of variation across the state in the types of benefits offered to center staff. Centers located in urban areas were slightly more likely to provide benefits, but there were centers in rural areas that provided generous benefits as well. Very few family child care home providers offered benefits to their paid assistant caregivers, but again, only 18% of family child care homes employed paid assistant caregivers.

Racial and Gender Composition of Staff. The percentage of family child care home providers who were White, Black, Hispanic, or of some other race/ethnicity are provided in Table 29 along with the racial/ethnic composition of center teachers displayed by age of children taught. The percentages do not sum to 100 (except in the last row) because some respondents did not fill out the question for all four race/ethnicity categories. Between 6.2% and 12.8% of center respondents did not answer the question about how many teachers were White, depending on the child's age group. Between 6.5% and 13.1% of center respondents did not answer the question when the race/ethnicity category was Black; between 6.3% and 13.7% of center respondents did not answer when the category was Hispanic; and between 6.6% and 16.3% of center respondents did not answer

Table 29. Racial Composition of Early Care & Education Providers

		% White	% Black	% Hispanic	% Other
Center-based care	Lead infant/toddler teachers	45%	48%	3%	1%
	Lead 3-year-old teachers	43%	52%	2%	2%
	Lead 4-year-old teachers (not GA Pre-K)	45%	50%	2%	2%
	Lead GA Pre-K teachers	65%	31%	2%	1%
	Lead 5+-year-old teachers	50%	43%	2%	1%
	Other teaching staff	45%	43%	3%	2%
Family child care homes	Paid assistant caregivers	21%	73%	2%	4%
	Family child care home owner	30%	65%	2%	3%

for the other race/ethnicity category. All family child care respondents answered the questions about the race/ethnicity of their paid assistant caregivers, but 10.7% did not answer the question about their own race/ethnicity.

Table 30. Gender Composition of Early Care & Education Providers

		% Female
Center-based care	Lead infant/toddler teachers	98.0%
	Lead 3-year-old teachers	96.4%
	Lead 4-year-old teachers (not GA Pre-K)	96.9%
	Lead GA Pre-K teachers	96.7%
	Lead 5+-year-old teachers	86.7%
	Other teaching staff	91.3%
Family child care homes	Paid assistant caregivers	86.5%
	Family child care home owner	99.5%

Child care staff were diverse in terms of race; in center care, for those reporting, between 31% and 52% of the teachers were Black. However, there were very few teachers who were Hispanic or of some other race/ethnicity. In family child care homes, the majority of owners and paid assistant caregivers were Black.

The gender breakdown is presented in Table 30. In all categories, the vast majority of providers were female. The providers who were least likely to be female were lead teachers for older children (age 5+) and paid assistant caregivers in family child care homes. One possible explanation for this may be that assistant caregivers might often be the husbands/partners of the family child care home owner.

Education of Providers. Table 31 shows the percentage of paid assistant caregivers, family child care home owners, and all center teachers who had completed, as their highest level of education, the category listed on the left. Table 32 provides the percentage of paid assistant caregivers, family child care home owners, and all center teachers who had the listed credentials. In all of the tables in this section, the columns do not sum to exactly 100% because some respondents did not fill out the question for all education or credential categories. Also note that in Table 32, because some individuals may have multiple credentials, it is not possible to sum up these percentages to determine what percentage of caregivers/teachers has any type of credential, or conversely, what percentage has no credential. 11.8% of respondents did not answer the education questions for lead teachers in education groups less than the Ph.D. category, 57.5% did not respond to the Ph.D. question, and 24.8% did not respond to the question for other teaching staff.

Table 31. Highest Level of Education of Early Care & Education Providers

	Paid Assistant Caregivers	Family Child Care Home Owner	Center Teachers
Some high school	13%	3%	4%
High school diploma or GED	37%	32%	37%
Some college	20%	27%	16%
Technical certificate or credit	11%	11%	4%
Technical college diploma	5%	11%	5%
A.A./S. degree	3%	6%	8%
B.A./S. degree	6%	8%	19%
M.A./S. degree	1%	2%	7%
Ph.D., Ed.D., M.D., or J.D. degree	0%	0%	1%

Table 32. Credentials of Early Care & Education Providers

	Paid Assistant Caregivers	Family Child Care Home Owner	Center Teachers
Certified Child Care Professional (CCP)	17%	18%	13%
Child Development Associate (CDA)	15%	14%	39%
National Administrator's Credential	3%	1%	3%
State of Georgia teaching certificate	8%	4%	36%
Teaching certificate from other state	5%	2%	8%
Specific curriculum training (e.g. Montessori)	20%	10%	62%

As expected, due to licensing requirements, a very small percentage of providers had less than a high school education.[6] The majority had some college or more. 65% of family child care owners had some education beyond a high school diploma, as did 59% of all center teachers and 50% of paid assistant caregivers.

Nearly a fifth of family child care owners and paid assistant caregivers had a Certified Child Care Professional (CCP) credential. Center teachers were very likely to have some kind of specific curriculum training, like Montessori, Creative Curriculum, High/Scope, or WestEd. They were also likely to have a Child Development Associate (CDA) credential and/or a teaching certificate.

Consistent with these findings, when providers were asked if they required a minimum certification or training credential for their employees, nearly 71% of centers and family child care homes indicated that they did. Of those that provided center-based care, over three-quarters (78.2%) of the respondents indicated that they required a minimum credential for their staff members. Among the family child care providers, 54.2% of the sample required a minimum credential for their staff. Moreover, when providers were asked how satisfied they were with the knowledge, skills, and competence of their current staff, slightly over 96% indicated that they were satisfied with the quality of their staff (ranging from somewhat to completely satisfied). Only 3.8% of respondents were not at all satisfied with the quality of their staff. Finally, survey data shows that close to 81% of providers indicated that their staff members were aware of opportunities such as HOPE scholarships, Pell grants, and other financial aid sources to support further study, suggesting that the majority of providers knew that opportunities for education existed and that there were financial means to support such endeavors.

Because the education and credentials of center staff may vary considerably by type of teacher, Table 33 provides the educational attainment of the center teachers by the type of teacher (based on the children's age taught), and Table 34 shows the credentials of the center teachers by the type of teacher. Very few teachers had less than a high school degree; however, because licensing rules prohibit non-high school graduates or non-GED recipients from these positions, these statistics should be zero. The vast majority of lead Georgia Pre-K teachers had a B.A. or higher, whereas relatively few lead infant/toddler teachers had education beyond high school. Similarly, the majority of lead Georgia Pre-K teachers had specific curriculum training and/or a teaching certificate from Georgia or another state. For non-Georgia Pre-K teachers, the most common types of credentials were the Child Development Associate credential and specific curriculum training.

The difference between Georgia Pre-K teachers and other types of teachers is expected because Georgia Pre-K teachers have minimum education/credential requirements. Currently, all lead Georgia Pre-K teachers must have at a minimum a credential equivalent to an associate's degree. The requirements have changed over time, so the Georgia Pre-K qualified lead teachers in this sample have varying levels of higher education.

[6]Paid assistant caregivers in family child care homes are exempt from this requirement.

Table 33. Highest Level of Education of Center Teachers by Child's Age

	Lead Infant/ Toddler	Lead 3 Yr Old	Lead 4 Yr Old (Not GA Pre-K)	Lead GA Pre-K	Lead 5+ Yr old	Other Teaching Staff
Some high school	7%	4%	3%	0%	6%	7%
High school diploma or GED	60%	37%	26%	2%	35%	56%
Some college	17%	22%	22%	2%	22%	22%
Technical certificate or credit	6%	7%	6%	1%	4%	5%
Technical college diploma	6%	10%	8%	5%	4%	5%
A.A./S. degree	6%	12%	17%	10%	6%	6%
B.A./S. degree	7%	13%	25%	55%	24%	10%
M.A./S. degree	1%	2%	4%	28%	7%	3%
Ph.D., Ed.D., M.D., or J.D. degree	1%	2%	1%	5%	1%	2%

Table 34. Credentials of Center Teachers by Child's Age

	Lead Infant/ Toddler	Lead 3 Yr Old	Lead 4 Yr Old (Not GA Pre-K)	Lead GA Pre-K	Lead 5+Yr Old	Other Teaching Staff
Certified Child Care Professional (CCP)	17%	19%	16%	8%	11%	5%
Child Development Associate (CDA)	27%	38%	45%	19%	30%	22%
National Administrator's Credential	2%	3%	4%	1%	2%	4%
State of Georgia teaching certificate	2%	11%	15%	72%	25%	13%
Teaching certificate from other state	10%	4%	10%	19%	12%	2%
Specific curriculum training	23%	43%	63%	78%	25%	35%

Summary of the early care and education workforce characteristics:

- The average wage for administrators in centers was $13.57 per hour; lead teachers earned an average of $10.45 per hour; and other teaching staff earned, on average, $7.94 per hour. In family child care homes, the average hourly wage for paid assistant caregivers was $7.09.
- Paid leave, paid holidays, paid time-off for training, and tuition reimbursement were offered to full-time employees in more than 60% of centers.
- Teachers and caregivers in the industry were racially diverse; in most teacher categories at centers, over 40% of teachers were Black. More than 65% of family child care home owners and paid assistant caregivers were Black. However, very few teachers and caregivers were Hispanic (2–3%). More than 90% of teachers and caregivers in almost every category (age group) were female.
- 65% of family child care owners, 59% of all center teachers, and 50% of paid assistant caregivers had some education beyond a high school diploma.
- Nearly 20% of family child care owners and 20% of their paid assistant caregivers had a Certified Child Care Professional (CCP) credential; over 60% of center teachers had specific curriculum training and 39% had a Child Development Associate (CDA) credential.

Methods

Survey Development. The UGA-GSU Child Policy Partnership formed a Policy Advisory Team and a Technical Advisory Team to advise all aspects of the economic impact study. With the help of Bright from the Start: Georgia Department of Early Care and Learning, members were appointed to represent various early care and education constituencies. The first task of the teams was to provide feedback in the survey development process. Before the first draft of the instruments was developed, the policy and technical advisory committees provided the research team with advice about the questions to be asked on the surveys and the types of questions that would be difficult for providers to answer. With these guidelines in mind, the researchers examined other surveys designed to gather similar information. From this examination and in connection with a review of what other states had done, the research team decided that there would need to be two versions of the survey instrument – one for early care and education centers and one for family child care homes. Once the instruments were drafted, the advisory teams reviewed the surveys and provided wording and formatting suggestions to the research team. Finally, the research team conducted pre-testing of the surveys with several centers and child care homes in the Metro Atlanta and Northeast–Athens regions and made several changes to the instruments to reflect those conversations. A copy of both instruments is included in Appendix B.

Population. Surveys were sent to all early care and education centers, group child care home providers, family child care home providers, Early Head Start and Head Start sites, and Georgia's Pre-Kindergarten Program sites in Georgia regulated by Bright from the Start. In addition, military early care and education centers were surveyed. Given that there was no comprehensive current description of the early care and education industry in Georgia, the entire population was surveyed, allowing the team to maximize the potential for capturing the diversity of providers and characteristics of early care and education settings in Georgia. This approach also avoids the potential bias associated with using a sample of the population; however, it does not remove all sources of potential survey error. For example, non-response bias may still be a possibility, and this is discussed later in this section.

The addresses were compiled from archived databases provided by Bright from the Start. Most of the providers were licensed and registered; however, some categories of providers included in the recorded files are exempt from licensure but are regulated, such as military facilities. The center survey was sent to 3,171 early care and education centers, 247 group child care homes, 339 Early Head Start and Head Start sites, 24 military early care and education centers, and 717 Georgia's Pre-Kindergarten Programs in the local school systems. The family child care home survey was sent to 5,831 family child care homes and 44 military family child care homes. The total number of early care and education providers contacted was 10,373.

Mailing of Surveys. One week prior to the mailing of the survey, a letter from the Bright from the Start Commissioner was sent to each center director and family child care home owner to inform them that the agency had contracted with the University of Georgia and Georgia State University to conduct the statewide survey. The letter explained the purpose of the study and provided contact information for questions about the project.

On May 8, 2007, 5,875 family provider surveys and 3,781 center surveys were mailed. On November 30, 2007, 717 center surveys were mailed to Georgia's Pre-K Programs in public schools.[7] In the first mailing of the survey, the research team provided respondents with a letter detailing the goals of the project, a toll-free contact number for questions or concerns, the survey instrument, a postage-paid return envelope, and a $5 Wal-Mart gift certificate as a small pre-incentive to providers. In addition to the paper survey, providers were given the option to complete the survey on the Internet. Log-on and password information was provided in the contact letter. Approximately two weeks after the surveys were mailed, a reminder postcard was sent to all providers.

[7]Georgia's Pre-K Programs were not included in the original mailing due to an oversight which was discovered when reviewing the data from the incoming surveys.

On June 19, 2007, a second survey was sent to the 4,191 center providers and 3,051 family child care homes that had not responded as of June 1. On January 10, 2008, a second survey was sent to the 301 Georgia's Pre-K Programs in the public schools that had not yet responded.

On August 13, 2007, the final survey contact was fielded for the 6,429 center and family providers who had not responded by August 1. Half of these providers, who were randomly chosen, were sent a final survey by certified mail and the other half were contacted by telephone. The phone contact involved asking providers whether they had received the survey, confirming their contact information, and answering any questions. On September 5, a third and final survey was mailed to the 651 providers who requested another mailing of the survey over the phone.

Table 35. Response Rate by Provider Type & Child Care Resource & Referral Region*

		Family Child Care Homes Response Rate	Center-Based Care Response Rate
1	Northwest–Cartersville	56.6%	53.8%
2	Northeast–Gainesville	62.8%	45.6%
3	Metro Atlanta	49.1%	42.4%
4	West Central–Thomaston	55.6%	59.1%
5	Northeast–Athens	50.5%	55.7%
6	Central–Macon	60.1%	41.2%
7	East–Augusta	50.9%	48.9%
8	West–Columbus	57.7%	27.9%
9	West–Americus	57.4%	48.3%
10	East–Swainsboro	64.7%	44.3%
11	Southwest–Albany	56.9%	42.3%
12	South Central–Tifton	62.1%	55.1%
13	South Central–Waycross	55.6%	69.5%
14	Southeast–Savannah	48.9%	50.8%
	Georgia	53.7%	48.4%

*Among family child care homes, Northeast–Gainesville, Central–Macon, East–Swainsboro, and South Central–Tifton had statistically significant higher response rates than the other regions, and Metro Atlanta had a statistically significant lower response rate than the other regions of the state. Among center-based providers, Northwest–Cartersville, West Central–Thomaston, Northeast–Athens, South Central–Tifton, and South Central–Waycross had statistically significant higher response rates than the other regions, and Metro Atlanta and West–Columbus had statistically significant lower response rates than the other regions.

Since the first surveys went out into the field, the survey research inquiry line received over 600 telephone calls on the toll-free number from providers asking questions about the survey. Common questions were about why the financial information was needed and how it was going to be used, and how to fill out the surveys if a center had multiple sites but only one set of financial record-keeping.

All surveys received by our closing date of February 1, 2008, were included in the analysis that informs this report.

Completed Surveys. Of the original 5,875 family surveys sent out, 715 were returned undeliverable. Of the 5,160 delivered surveys, 2,772 were returned completed (53.7% response rate). Of those, 310 were completed online (11.2% of the completed family surveys). Of the original 4,498 center surveys mailed (including Georgia's Pre-K Programs), 416 were returned undeliverable. Of the 4,082 delivered surveys, 1,976 were returned completed (48.4% response rate)—416 of which were completed online (21.1% of the completed center surveys). The total number of surveys completed was 4,748 (51.4% response rate). Table 35 shows the response rates for center providers and family providers by 14 regions in Georgia.

Table 36. Comparison Between Respondents & Non-Respondents Using Administrative Data

	Respondents	Non-Respondents
Average licensed capacity of centers	105	112
Percentage of family providers in urban counties*	65%	71%
Percentage of centers in urban counties*	55%	63%
Percentage of centers offering Georgia's Pre-K Programs	36%	31%
Number of providers	4,748	4,494

*Urban counties in Georgia are defined as those with populations over 100,000 or central counties for one of Georgia's metropolitan statistical areas: Fulton, DeKalb, Cobb, Gwinnett, Clayton, Chatham, Richmond, Muscogee, Bibb, Cherokee, Hall, Henry, Houston, Clarke, Dougherty, Lowndes, Floyd, Whitfield, Glynn, and Liberty.

Statistical analyses were conducted to examine the response rates of providers by Child Care Resource and Referral region. The response rates for both centers and family child care homes were significantly lower for the Metro Atlanta region. Otherwise, the variation in response rates by region follows a different pattern by provider type. For family homes, the Northeast–Gainesville, Central–Macon, East–Swainsboro, and South Central–Tifton regions had significantly higher response rates than the rest of the regions. For center providers, the Northwest–Cartersville, West Central–Thomaston, Northeast–Athens, South Central–Tifton, and South Central–Waycross regions had significantly higher response rates than the rest of the regions, and the West–Columbus region had a significantly lower response rate than the rest of the state. Overall, with the exception of center-based providers in the West–Columbus region, the response rates were higher than attained by other behavioral surveys conducted in Georgia which indicate response rates around 40% (CDC, 2007).

Comparison of Survey Respondents to Non-Respondents. In an effort to determine the extent to which the data collected from early care and education providers who returned the surveys (51.4% of the population) are generalizable to the population of providers in Georgia, two comparisons were made with existing administrative data from BftS provided specifically for this project and a non-respondent follow-up sub-study from the survey. As a first comparison, a limited amount of data was available from administrative databases within Bright from the Start on all providers who were initially sent a survey. Thus, the survey data can be compared to the non-respondents' information in the administrative database on three characteristics: capacity of child care centers, urban/rural status, and provision of Georgia's Pre-K Programs. Table 36 displays these comparisons. For all comparisons, there are significant differences between respondents and non-respondents. It should be noted that because the samples are fairly large in this comparison, these averages are estimated with a lot of precision, resulting in a high likelihood that statistically significant differences are found. Therefore, the differences among the groups may not be 'true', but rather an artifact of measuring so many people. In particular, the average licensed capacity of early care and education centers, obtained from state data, is significantly lower for respondents. While there are urban and rural centers across the state of Georgia, the respondents to the family child care home and center surveys were more likely to be located in rural counties than in urban centers of the state. Finally, centers with Georgia's Pre-K Programs were more likely to respond to the survey than centers without this program.

A separate non-respondent follow-up study was conducted to judge the comparability of the respondent and non-respondent data. Providers who had not responded by November 15, 2007, were sampled in proportion to their representation in the population based on three geographic zones (used in the Childcare Market Rate Survey: Metro Atlanta, smaller urban and suburban areas, and rural areas in the state) and six provider types. This non-respondent sample was sent a survey and a cover letter offering a large post-incentive; the first 200 to return a completed survey would receive a $30 gift certificate. The research team compared the responses from this "hard to reach" sample to the responses from the main population of survey respondents to ascertain if there were important non-response biases which should be taken into consideration.

Because of uncertainty about how large the response would be to the post-incentive, surveys and the $30 offer to non-respondents were sent out in batches. On November 27, 2007, 570 surveys were mailed out (500 non-respondents were randomly selected and 70 non-respondents were chosen because they were from particularly unrepresented provider types or regions). On December 19, 2007, an additional 100 surveys were mailed out. On January 19, 2008, 330 additional surveys were sent to non-respondents. Finally, on February 29, 2008, 1000 additional surveys were sent to non-respondents. The "hard to reach" sample was contacted only one time as a part of this sub-study, thus, a total of 2,000 "hard to reach" non-respondents were mailed surveys and the $30 offer. As of May 1, 2008, 171 surveys from the "hard to reach" sample were received; 101 from family child care homes and 70 from center-based providers. This "hard to reach" sample is not included in the data used to generate the survey findings presented in the main body of this report; it is only used to make comparisons in this section. At least one non-respondent survey was received from each of the 14 Child Care Resource and Referral regions. Like the initial survey, respondents could complete a paper version of the survey or complete the survey via the Internet. Of those who completed the survey, 53 (31.0%) of the 171 chose to complete the survey via the Internet.

Overall, the samples look similar. Of 125 comparisons made regarding family child care homes, the "hard to reach" sample answers were significantly different from the answers given by the main respondents in 10 cases (8.0%). Of 214 comparisons made regarding center-based providers, the "hard to reach" sample answers were significantly different in 34 cases (15.9%). Given that a 95% confidence threshold for statistical significance was used, even if there was no difference between the respondents and the "hard to reach" respondents, 5% of the comparisons should be different by random chance. Because a slightly higher percentage of differences were found, all of the significant differences for family child care home characteristics and for center-based care characteristics are presented in Tables 37 and 38.

According to Table 37, the "hard to reach" family child care homes were more likely to provide transportation, have older children, receive state funding, and provide reduced-price lunches. They were also slightly more generous in terms of benefits to their paid assistant caregivers, although their average hours were lower and their turnover rates were higher. This implies that the picture of the family child care homes in Georgia presented in this report may be slightly skewed towards providers who offered a more limited set of services, catered to younger children, and did not offer many benefits to their staff compared to the population of providers. Despite these slight differences, the providers who initially completed the survey and those who were "hard to reach" were more similar than different on the majority of variables assessed for family child care providers.

Table 37. Comparison Between Family Respondents & Family "Hard to Reach" Respondents Using Follow-up Study

	Respondents	"Hard to Reach" Respondents
Percent that provide transportation	18.7	32.3
Average number of enrolled children age 6-13	1.3	2.6
Percent that receive no state funding	98.4	94.1
Percent of children receiving reduced-price lunch	2.6	7.2
Average number of paid assistant caregivers who quit during the past year	0.3	0.8
Average number of hours worked per week by paid assistant caregivers	20.0	12.8
Percent who offer full-time paid assistant caregivers a retirement plan	0.0	0.1
Percent who offer part-time paid assistant caregivers a retirement plan	0.0	0.1
Percent who offer part-time paid assistant caregivers overtime pay	1.9	5.0
Percent of paid assistant caregivers whose highest level of education is a Ph.D.	1.5	10.0

Table 38. Comparison Between Center Respondents & Center "Hard to Reach" Respondents Using Follow-up Study

	Respondents	"Hard to Reach" Respondents
Current enrollment	73.6	97.3
Self-reported licensed capacity	100.0	130.3
Average number of enrolled children who are age 2	6.7	12.5
Percent of program revenues from parent fees	55.5	39.3
Percent of program revenues from food programs	12.3	20.6
Percent receiving no parent fees	31.1	12.5
Percent receiving no DFCS subsidies	36.3	12.5
Average parent fee for children under 6 months in suburban & rural areas of the state	98.9	130.1
Average parent fee for children 6-12 months in suburban & rural areas of the state	97.8	126.0
Percent of children enrolled whose race/ethnicity is specified as not White, Black or Hispanic	4.4	7.7
Percent of children in this center enrolled full-time	88.1	78.2
Percent of children in this center enrolled part-time	6.5	11.3
Percent of children in this center enrolled in before-school care	3.4	8.4
Percent of children in this center enrolled in after-school care	16.4	26.6
Percent who offer full-time employees free or reduced child care	44.5	68.9
Percent who offer part-time employees free or reduced child care	23.2	36.1
Percent who offer full-time employees paid holidays	67.9	80.3
Percent who offer full-time employees paid time for training	65.5	78.7
Percent who offer full-time employees overtime pay	42.5	57.4
Percent of lead infant/toddler teachers who are Hispanic	2.8	12.9
Percent of lead 3-year-old teachers whose race/ethnicity is specified as not White, Black or Hispanic	0.6	6.2
Percent of lead GA Pre-K teachers whose race/ethnicity is specified as not White, Black or Hispanic	1.6	6.3
Percent of lead 5+-year-old teachers who are Hispanic	2.0	15.4
Percent of other teaching staff who are Hispanic	3.8	15.4

Table 38. Comparison Between Center Respondents & Center "Hard to Reach" Respondents Using Follow-up Study (continued)

	Respondents	"Hard to Reach" Respondents
Percent of other teaching staff whose race/ethnicity is specified as not White, Black or Hispanic	1.9	7.9
Percent of lead infant/toddler teachers whose highest level of education is an M.A.	0.7	5.6
Percent of lead infant/toddler teachers whose highest level of education is a Ph.D.	1.8	21.4
Percent of lead 3-year-old teachers whose highest level of education is a Ph.D.	0.8	8.3
Percent of lead 5+-year-old teachers whose highest level of education is a Ph.D.	1.4	20.0
Percent of other teaching staff whose highest level of education is a B.A.	12.1	38.6
Percent of lead 3-year-old teachers with a teaching certificate from another state	2.8	46.2
Percent of lead GA Pre-K teachers with a Certified Child Care Professional (CCP) credential	9.7	33.3
Percent of lead GA Pre-K teachers with a specific curriculum training credential	90.1	54.2
Percent of other teaching staff with a Child Development Associate (CDA) credential	22.7	42.3

Note that many of the numbers represented in this table are not directly comparable to statistics reported in the previous sections. In particular, the characteristics of children and staff are computed at the center level in this table, but at the regional or state level in the rest of the report.

According to Table 38, the "hard to reach" center-based providers were larger, were more racially and ethnically diverse in terms of children and staff, provided more part-time and before- and after-school care, offered more benefits to staff, and had more highly educated teachers than the main survey respondents. This implies that the average characteristics of center-based providers presented in this report is skewed towards smaller and less diverse programs. In addition, the education of the teaching staff and the benefits provided to staff may be underestimated in this report. However, as with the family child care homes, the center-based providers who initially completed the survey and those who were "hard to reach" were more similar than different on the majority of variables assessed.

Importantly for the short-term economic impact analysis which derives some of its information from this survey, the "hard to reach" respondent study results suggest that for the most part, the revenues and the parent fees presented in this report are representative. The wages and hours worked by staff, as well as the characteristics of the children in care, from the percentage receiving BftS grants to the percentage who spoke English as a second language, are also largely representative. This evidence indicates that, if anything, the estimates provided in this

Table 39. Percentage of Respondents Who Did Not Answer Selected Survey Questions

	Family Child Care Home Item Non-Response Rate	Center-Based Care Item Non-Response Rate
What is the total current enrollment?	9%	10%
What were the annual revenues in 2006?	41%	34%
Does this home have the following costs? **OR** What were the annual operating costs in 2006?	77%	61%
Are there paid assistant caregivers? **OR** Number of permanent employees?	16%	22%

report may underestimate the size of the industry because the smaller centers in the state appear to have responded in higher numbers to the survey.

Item Non-Response Rates. When survey respondents returned a completed survey, many did not answer every question on the survey. Table 39 provides the item non-response rates for several selected questions for family providers and centers.

For questions about their early care and education program, such as enrollments and employees, the item non-response rates were relatively low. For questions about income, the item non-response rates were 41% for family child care homes and 34% for centers. These rates are not out of line with the literature in survey research. Astrostic and Kalenkoski (2002) found that the item non-response rate on the March Current Population Survey in 2000 for questions about total business revenues was 41.2%. Similarly, Brunn and Moore (2005) reported that for the Survey of Income and Program Participation (a national survey), the asset income item non-response rate was 40%. In addition, it is known that self-employed people are less likely to report their revenues than other individuals (Lillard, Smith and Welch, 1986). Thus, the research team views the item non-response rate on income as reasonable.

In contrast, the item non-response rate for costs, particularly for the family home providers, was very high. Because this high item non-response rate was observed as the first surveys were arriving, the survey research team experimented with the survey design to determine whether the density of the survey layout was responsible. The redesign involved expanding the number of pages from four to eight and including more detailed instruction blocks and visual cues. The redesigned surveys were sent to half of those who received a survey by certified mail in August 2007. The research team found no difference in the item response rates (or the overall response rates) by survey design and thus concluded that item non-response was attributable to the sensitivity of the questions and to the high respondent burden required to collect the information to answer the question. Due to the high item non-response rate and because typically only a gross receipts estimate is used to measure the economic impact of the industry,[8] the statistics on the operating costs are not reported.

Summary of Survey Findings

Due to the complex nature of the early care and education industry's economic impact on the state economy, there is a need to provide policy makers, industry administrators, the business community, and Georgia's citizens with a clear portrait of the characteristics and contributions this industry makes to the Georgia economy. The purpose of this survey report is to provide a comprehensive profile of demographic information of Georgia's early care and education industry. In addition, these data are used to support the economic impact analysis of the early care and education industry in the state presented in the main body of this report. The data for this appendix were derived from Georgia's Early Care and Education Economic Impact Survey that was administered to family and center providers across Georgia. The survey response rate was 54% for family child care providers and 48% for centers.

[8]Gross receipts was the standard statistic used to measure economic impact in the studies for New York, Massachusetts, Kansas, Minnesota, North Carolina, and Ohio, among others.

Overall, the survey data presented in this appendix provide a detailed picture of a vibrant and important industry in Georgia. Below are highlighted a few of the important findings from the survey responses received:

- Centers and family child care homes serve children of need and provide many services:
  - 45% of children in centers and 24% in family child care homes received free or reduced-price lunch
  - 17–18% of children received DFCS subsidies
  - 4% had been diagnosed with disabilities, most of whom received services from Babies Can't Wait
  - English was not the first language for 2.5% in family child care homes and 5.9% in center-based care
  - Most centers and family child care providers operated year round; 40% of family child care providers and 30% of centers offered care on weekends and holidays
  - Transportation was offered by more than a third of the providers surveyed
- The industry serves children of all races and ethnicities, but the percentage of Black children in care represented a larger portion of the population than the number of Black children in the state at large.
- The median annual revenues per enrolled child in family child care homes was $2,750 and in center-based care (not including Head Start or Georgia's Pre-K programs) was $2,860.
- The average weekly parent fee for infants ranged from $70 to $120 for family child care homes and from $80 to $145 for centers, based on geographic area.
- Among those providers that received any parent fees, parent fees accounted for between 55% and 58% of total revenues; the rest came from state and federal funds and charitable donations.
- Family child care homes reported median annual revenues of $14,000 and centers reported median annual revenues of over $117,000.
- Center staff profile data suggest that the majority of staff working in the industry were directly engaged with the children as lead teachers or teaching staff, most of whom worked a full work week.
- The average wage for administrators in centers was $13.57 per hour, while lead teachers earned an average of $10.45 per hour, and other teaching staff earned, on average, $7.94 per hour. In family child care homes, the average hourly wage for paid assistant caregivers was $7.09.
- Paid leave, paid holidays, paid time-off for training, and tuition reimbursement were offered to full-time employees in more than 60% of centers. About a third of centers that participated in the survey reported other fringe benefits, including offering health insurance and a retirement plan.
- Teachers and caregivers in the industry were racially diverse; in most teacher categories at centers, over 40% of teachers were Black. More than 65% of family child care home owners and paid assistant caregivers were Black. However, very few teachers and caregivers were Hispanic (2–3%). More than 90% of teachers and caregivers in almost every category (age group) were female.
- 65% of family child care owners, 59% of all center teachers, and 50% of paid assistant caregivers had some education beyond a high school diploma.
- Nearly 20% of family child care home owners and their paid assistant caregivers had a Certified Child Care Professional (CCP) credential; over 60% of center teachers had specific curriculum training and 39% had a Child Development Associate (CDA) credential.

Appendix B – Survey Instruments

Bright from the Start Survey

PLEASE FOLLOW THESE INSTRUCTIONS…

* Use a blue or black ink pen to fill out this questionnaire. (DO NOT USE A PENCIL)
* Completely fill in the appropriate bubble, like this ● .
* If you make a mistake, mark through the incorrect bubble, like this ⊗, and fill in the correct bubble.

1. How many months during the year is this childcare program open to care for children?

- ◯ 12 months a year
- ◯ 9 months a year (during the school year only)
- ◯ 3 months a year (during the summer only)

2. What time does this childcare program open and close? *(Please fill in the opening and closing times for each and circle a.m. or p.m. If the program is not open, please fill in the "Not open" circle.)*

	Not Open	Open		Close	
Monday-Friday	◯		a.m. p.m.		a.m. p.m.
Saturday	◯		a.m. p.m.		a.m. p.m.
Sunday	◯		a.m. p.m.		a.m. p.m.
Holidays	◯		a.m. p.m.		a.m. p.m.

3. Does this childcare program provide any type of daily transportation for children *(e.g. to and from school)***?**

- ◯ Yes
- ◯ No

4. Is this childcare program considered for-profit or not-for-profit?

- ◯ For profit
- ◯ Not for profit

5. What is the total licensed capacity? *(Please write NA if you are not licensed or exempt from licensing.)*

☐

6. What is the total current enrollment?

☐

7. Currently, how many children are on a waiting list for this childcare program *(please write NA if you do not keep a waiting list)*

☐

8. Currently, how many children in this program... *(Please write 0 if you have no children that fall into that category.)*

Receive free lunch	☐
Receive reduced lunch	☐
Have families that receive DFCS subsidies	☐
Participate in the Child and Adult Food Care Program	☐
Have a diagnosed physical or developmental disability	☐
Receive services from Babies Can't Wait program	☐
Do not speak English as their first language	☐
Are White	☐
Are Black	☐
Are Hispanic	☐
Are another race/ethnicity not listed	☐

9. Currently, how many children are enrolled...

Full-time	☐
Part-time *(not including those enrolled in after school care)*	☐
Before school only	☐
After-school only	☐
In wrap around childcare	☐

10. What were the annual revenues (income) for this childcare program in 2006? *(Please do not double count revenue.)*

$ ____

11. Please write the number of children that fall into each age group and the weekly base rate per child for that age group. *(If you do not provide care for children in any given age group, please write N/A).*

	# of children	Weekly base rate per child
Under 6 months		$
6 months but less than 12 months		$
12 months but less than 18 months		$
18 months but less than 24 months		$
2 years but less than 3 years		$
3 years but less than 4 years		$
4 years but less than 5 years		$
5 years but less than 6 years		$
6 years to 13 years		$

12. Does this childcare program get funding from any of the sources listed below? *(If it does, please list the amount of money recieved each year from that source. Do not double count revenue.)*

	Does Not	Does	Annual Amount Received
Parent fees	○	○	$
DFCS subsidies	○	○	$
GA lottery/Pre-K	○	○	$
BFTS grant or mini-grant	○	○	$
Child and Adult Care Food Program	○	○	$
Summer Food Services Program	○	○	$
Early Head Start	○	○	$
Head Start	○	○	$
Other Federal Funds	○	○	$
United Way	○	○	$
Charitable Contributions	○	○	$

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13. What were the annual operating costs (expenses) for this childcare program in 2006? *(Please do not double count expenditures.)*

$ ____

14. Does this childcare program have any of the costs listed below? *(If it does, please list the annual cost for each category. Do not double count expenditures.)*

	Does Not	Does	Annual Cost
Rent/mortgage	○	○	$
Utilities *(gas and electric, water, trash removal)*	○	○	$
Repair and maintenance *(lawn care, janitorial services)*	○	○	$
Food and food service	○	○	$
Insurance	○	○	$
Taxes *(property, occupancy)*	○	○	$
Wages for center staff	○	○	$
Training for center staff	○	○	$
Other operating costs *(supplies and equipment)*	○	○	$

15. Do you offer the following benefits for full-time staff, part-time staff or are they not offered at all? *(Fill in all that apply)*

	Full-time	Part-time	Not at all
Free or reduced rate of care for staff members' children/family	○	○	○
Paid Holidays	○	○	○
Paid time for training and education	○	○	○
Payment for training, tuition, registration fees	○	○	○
Paid time if program is closed due to bad weather	○	○	○
Paid leave (including sick, vacation, and personal)	○	○	○
Health insurance	○	○	○
Dental and/or vision insurance	○	○	○
Retirement plan	○	○	○
Over-time pay	○	○	○

16. Now we'd like to ask you a series of questions about the employees of this childcare program. *(For the following questions, we divide employees into categories based on the job title they hold. If a person falls into more than one category, please answer according to the category in which they spend most time. For instance, if an individual is a lead teacher every day but occasionally does clerical work please place that person in the Lead Teacher category.)*

	Admin-istrators/ Directors	Lead Teachers	Other Teaching Staff	Specialists	Clerical Staff	Auxilary Staff
Number of permanent part-time and full-time employees						
Number of permanent employees that quit this childcare program during the past year						
Number of seasonal or temporary employees						
Average wage per hour	$	$	$	$	$	$
Average number of hours worked per week by an individual in this category						

17. For the following questions, we are interested in the<u>TEACHERS ONLY</u> at this childcare program *(We divide teachers into the following categories. Each question should be answered individually for all of the categories of teachers. If you do not employ any teachers in a category, please write 0 for number of teachers and move on to the next category.)*

	Lead Infant/ Toddler	Lead 3 Yr Old	Lead 4 Yr Old (Not Pre-K)	Lead GA Pre-K	Lead 5+ Yr Old	Other Teaching Staff
Number of teachers						
Number of White teachers						
Number of Black teachers						
Number of Hispanic teachers						
Number of teachers of some other race or etnicity not listed						
Number of female teachers						
Number of male teachers						
Number enrolled in technical or college programs						

18. Please enter the number of teachers who have completed the following as their highest level of education.

	Lead Infant/ Toddler	Lead 3 Yr Old	Lead 4 Yr Old (Not Pre-K)	Lead GA Pre-K	Lead 5+ Yr Old	Other Teaching Staff
Some high school						
High school diploma or GED						
Some college						
Technical certificate or credit (TCC)						
Technical college diploma						
Associate of Arts or Sciences Degree (AA or AS)						
Bachelor of Arts or Sciences Degree (BA or BS)						
Master of Arts, Sciences or Education Degree (MA, MS, or M.Ed.)						
Doctor of Philosophy or Education (Ph.D. or Ed.D.) or other terminal degree (M.D. or J.D.)						

19. Please enter the number of teachers who hold the following credentials.

	Lead Infant/ Toddler	Lead 3 Yr Old	Lead 4 Yr Old (Not Pre-K)	Lead GA Pre-K	Lead 5+ Yr Old	Other Teaching Staff
Certified Child Care Professional (CCP)						
Child Development Associate (CDA)						
National Administrator's Credential						
State of Georgia teaching certificate						
Teaching certificate from any other state than Georgia						
Specific curriculum training *(e.g. Montessori, High/Scope, Creative Curriculum, etc.)*						

This portion of the survey should be filled out only by the childcare program director or owner.

20. How aware is your staff of career opportunities for those who work in childcare?
- ◯ Completely aware
- ◯ Very aware
- ◯ Somewhat aware
- ◯ Not at all aware

21. How aware are you or your staff of financial aid (e.g., HOPE scholarships, Pell grant, etc.) for further study in careers with young children?
- ◯ Completely aware
- ◯ Very aware
- ◯ Somewhat aware
- ◯ Not at all aware

22. Do you require a minimum certification/training credential for your staff?
- ◯ Yes
- ◯ No

23. How satisfied are you with the quality of staff (e.g., knowledge, skills, competence) for your program?
- ◯ Completely satisfied
- ◯ Very satisfied
- ◯ Somewhat satisfied
- ◯ Not at all satisfied

24. In the next five years, do you plan on adding staff to your program?
- ◯ Yes
- ◯ No

25. Do you have staff who leave your program to work in the public schools because of the increased wages that are offered to them?
- ◯ Yes
- ◯ No

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26. Do families know what "quality child care" is?
- ◯ Yes
- ◯ No

27. How willing are your clients to pay more for higher quality child care?
- ◯ Very willing
- ◯ Somewhat willing
- ◯ Not willing at all

28. How adequate do you think the state resources are to assist with the operation of your program (e.g., training opportunities, professional resources, grants, etc.)?
- ◯ More than enough resources
- ◯ Just enough resources
- ◯ Not enough resources

29. How adequate do you think the incentives are for child care providers(e.g., tax credits, exemptions, etc.)?
- ◯ More than adequate resources
- ◯ Just enough resources
- ◯ Not adequate resources

30. Do you think the state needs to invest more in infant and toddler programs?
- ◯ Yes
- ◯ No

31. How connected is your program to the local school(s) (e.g., providing services for children with special needs, after-school care, transition to school issues)?
- ◯ Very connected
- ◯ Somewhat connected
- ◯ Not at all connected

32. Are you collaborating with businesses in your community to provide child care?
- ◯ Yes
- ◯ No

Bright from the Start Survey

PLEASE FOLLOW THESE INSTRUCTIONS…

* Use a blue or black ink pen to fill out this questionnaire. (DO NOT USE A PENCIL)
* Completely fill in the appropriate bubble, like this ●.
* If you make a mistake, mark through the incorrect bubble, like this ⊗, and fill in the correct bubble.

1. How many months during the year is this family day care home open to care for children?

- ○ 12 months a year
- ○ 9 months a year (during the school year only)
- ○ 3 months a year (during the summer only)

2. What time does this family day care home open and close? *(Please fill in the opening and closing times for each and circle a.m. or p.m. If the program is not open, please fill in the "Not open" circle.)*

	Not Open	Open		Close	
Monday-Friday	○		a.m. p.m.		a.m. p.m.
Saturday	○		a.m. p.m.		a.m. p.m.
Sunday	○		a.m. p.m.		a.m. p.m.
Holidays	○		a.m. p.m.		a.m. p.m.

3. Does this family day care home provide any type of daily transportation for children *(e.g., to and from school)***?**

- ○ Yes
- ○ No

4. What is the total current enrollment?*(not including your own children or children for whom you do not receive fees)*

5. How many children in this family day care home do you care for without receiving payment? *(such as your own children or relatives)*

6. Currently, how many children are on a waiting list for this family day care home *(please write NA if you do not keep a waiting list)*

7. Currently, how many children in this family day care home...*(Please write 0 if you have no children that fall into that category.)*

Receive free lunch	
Receive reduced lunch	
Have families that receive DFCS subsidies	
Participate in the Child and Adult Food Care Program	
Have been diagnosed with a physical or developmental disability	
Do not speak English as their first language	
Receive services from Babies Can't Wait program	
Are White	
Are Black	
Are Hispanic	
Are another race/ethnicity not listed	

8. Currently, how many children are enrolled...

Full-time	
Part-time *(not including those enrolled in after school care)*	
Before school only	
After-school only	
In wrap around childcare	

9. Please write the number of children that you currently care for in each age group. Then, please indicate the weekly base rate for a child in that age group. *(If you do not provide care for children in any given age group, please write N/A).*

	# of children	Weekly base rate per child
Under 6 months		$
6 months but less than 12 months		$
12 months but less than 18 months		$
18 months but less than 24 months		$
2 years but less than 3 years		$
3 years but less than 4 years		$
4 years but less than 5 years		$
5 years but less than 6 years		$
6 years to 13 years		$

10. Does this family day care home get funding from any of the sources listed below? *(If it does, please list the amount of money recieved each year from that source. Do not double count revenue.)*

	Does Not	Does	Annual Amount Received
Parent fees	◯	◯	$
DFCS subsidies	◯	◯	$
BFTS grant or mini-grant	◯	◯	$
Child and Adult Care Food Program	◯	◯	$
Summer Food Services Program	◯	◯	$
State Funds	◯	◯	$
United Way	◯	◯	$
Charitable Contributions	◯	◯	$

11. What were the GROSS annual earnings (income BEFORE taxes and expenses) for this family daycare home in 2006? *(Line 1 of IRS form Schedule C. Please do not double count revenue.)*

$

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12. What were the NET annual earnings (income AFTER taxes and expenses) for this family day care home in 2006? *(Line 30 of IRS form Schedule C. Please do not double count revenue.)*

$

13. Does this family day care home have any of the costs listed below? *(If it does, please list the annual cost for each category. Do not double count expenditures.)*

	Does Not	Does	Annual Cost
Rent/mortgage	◯	◯	$
Utilities *(gas and electric, water, trash removal)*	◯	◯	$
Repair and maintenance *(lawn care, janitorial services)*	◯	◯	$
Food and food service	◯	◯	$
Insurance	◯	◯	$
Taxes *(property, occupancy)*	◯	◯	$
Wages for paid assistant caregivers	◯	◯	$
Training for paid assistant caregivers	◯	◯	$
Other operating costs *(supplies and equipment)*	◯	◯	$

14. Are their part-time or full-time paid assistant caregivers in this family daycare home?

◯ Yes **Continue to #15**

◯ No **SKIP TO #23**

15. In this family day care home, what is/are the...

Total number of paid assistant caregivers	
Number of paid assistant caregivers that left this family daycare homeduring the past year *(not including temporary or seasonal staff)*	
Average wage per hour for paid assistant caregivers	$
Average number of hours a paid assistant caregiver works per week	

16. How many paid assistant caregivers are...

White	
Black	
Hispanic	
Some other race or ethnicity	
Female	
Male	
Enrolled in technical or college programs	

17. Please enter the number of paid assistant caregivers who have completed the following as their highest level of education.

Some high school	
High school diploma or GED	
Some college	
Technical certificate or credit (TCC)	
Technical college diploma	
Associate of Arts or Sciences Degree (AA or AS)	
Bachelor of Arts or Sciences Degree (BA or BS)	
Master of Arts, Sciences or Education Degree (MA, MS, or M.Ed.)	
Doctor of Philosophy or Education (Ph.D. or Ed.D.) or other terminal degree (M.D. or J.D.)	

18. Please enter the number of paid assistant caregivers who hold the following credentials.

Certified Child Care Professional (CCP)	
Child Development Associate (CDA)	
National Administrator's Credential	
State of Georgia teaching certificate	
Teaching certificate from any other state than Georgia	
Specific curriculum training *(e.g. Montessori, High/Scope, Creative Curriculum, etc.)*	

19. Do you offer the following benefits for full-time staff, part-time staff or are they not offered at all? *(Fill in all that apply)*

	Full-time	Part-time	Not at all
Free or reduced rate of care for caregivers' children/family	◯	◯	◯
Paid time if home is closed for a holiday	◯	◯	◯
Paid time for training and education	◯	◯	◯
Payment for training, tuition, registration fees	◯	◯	◯
Paid time if home is closed due to bad weather	◯	◯	◯
Paid leave (including sick, vacation, and personal)	◯	◯	◯
Health insurance	◯	◯	◯
Dental and/or vision insurance	◯	◯	◯
Retirement plan	◯	◯	◯
Over-time pay	◯	◯	◯

20. How aware are your paid assistant caregivers of career opportunities for those who work in childcare?

- ◯ Completely aware
- ◯ Very aware
- ◯ Somewhat aware
- ◯ Not at all aware

21. Do you require a minimum certification/training credential for your paid assistant caregivers?

- ◯ Yes
- ◯ No

22. How satisfied are you with the quality ofpaid assistant caregivers (e.g., knowledge, skills, competence) for your family daycare home?

- ◯ Completely satisfied
- ◯ Very satisfied
- ◯ Somewhat satisfied
- ◯ Not at all satisfied

23. How aware are you or your paid assistant caregivers of financial aid (e.g., HOPE scholarships, Pell grant, etc.) for further study in careers with young children?

- ◯ Completely aware
- ◯ Very aware
- ◯ Somewhat aware
- ◯ Not at all aware

24. In the child care business, do you think that there is too much staff turnover?

- ◯ Yes
- ◯ No

25. Do families know what "quality child care" is?

- ◯ Yes
- ◯ No

26. How willing are your clients to pay for higher quality child care?

- ◯ Very willing
- ◯ Somewhat willing
- ◯ Not willing at all

27. How adequate do you think the state resources are to assist with the operation of your family day care program (e.g., training opportunities, professional resources, grants, etc.)?

- ◯ More than enough resources
- ◯ Just enough resources
- ◯ Not enough resources

28. How adequate do you think the incentives are for child care providers (e.g., tax credits, exemptions, etc.)?

- ◯ More than adequate resources
- ◯ Just enough resources
- ◯ Not adequate resources

29. Do you think the state needs to invest more in infant and toddler programs?

- ◯ Yes
- ◯ No

30. How connected is your program to the local school(s) (e.g., providing services for children with special needs, after-school care, transition to school issues)?

- ◯ Very connected
- ◯ Somewhat connected
- ◯ Not at all connected

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Now we would like to ask a few questions about you, the owner of this family day care home. Please remember that your responses will be confidential. Any reporting will be done in groups, no individual person will be able to be identified.

31. Do you consider yourself to be...

- ◯ White
- ◯ Black
- ◯ Hispanic
- ◯ Other race or ethnicity not listed

32. Are you...

- ◯ Male
- ◯ Female

33. In what year were you born?

☐

34. What is your highest level of education?

- ◯ Some high school
- ◯ High school diploma or GED
- ◯ Some college
- ◯ Technical certificate or credit (TCC)
- ◯ Technical college diploma
- ◯ Associate of Arts or Sciences
- ◯ Bachelor of Arts or Sciences Degree (AA or AS)
- ◯ Master of Arts, Sciences, or Education Degree (MA, MS, or M.Ed.)
- ◯ Doctor of Philosophy or Education (Ph.D. or Ed.D) or other terminal degree (M.D. or J.D.)

35. Do you hold any of the following credentials?

- ◯ Certified Child Care Professional (CCP)
- ◯ Child Development Associate (CDA)
- ◯ National Administrator's Credential
- ◯ State of Georgia teaching certificate
- ◯ Teaching certificate from any state other than Georgia
- ◯ Specific curriculum training (eg. Montessori, High/Scope, Creative Curriculum, etc.

Thank you for taking the time to fill out this survey. Please return it in the envelope provided!

Appendix C – Bibliography

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