

# **ECONOMIC IMPACT OF THE CHILD CARE INDUSTRY IN VIRGINIA**



**Prepared by Voices for Virginia's Children**  
with Economic Analysis by **Chmura Economics & Analytics**

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## Project Staff

**Cindy Hetzel, M.B.A.**, Voices for Virginia's Children  
**Suzanne Clark Johnson, Ph.D.**, Voices for Virginia's Children  
**Xiaobing Shuai, Ph.D.**, Chmura Economics & Analytics

## Policy Advisory Team

**Sal Asad, M.S.**, Federal Reserve Information Technology  
**Maria Curran**, Virginia Commonwealth University Health System  
**Iris E. Holliday**, Dominion  
**Rosalyn Key**, Capital Area Workforce Investment Board  
**Bill King**, Westminster Canterbury  
**Teri Craig Miles, J.D.**, Circuit City Stores  
**Karen Sweeney**, Memorial Child Guidance Clinic  
**Anne-Marie Twohie, M.Ed.**, Fairfax County Office for Children

## Technology Advisory Team

**James Davenport, Ph.D.**, Virginia Commonwealth University  
Department of Statistic Sciences and Operations Research  
**Lyndsi Hicks, M.S.**, United Way, Virginia Commonwealth University

**Cynthia Jones, Ph.D.**, Voices for Virginia's Children  
**Arlene Kasper, M.S.**, Department of Social Services  
**Brian Kroll**, Virginia Economic Development Partnership  
**Robert Pyndell**, Virginia Department of Social Services  
**Sharon Veatch, M.A.**, Virginia Association of Resource and Referral Networks  
**Kristi Wright, M.S.W., J.D.**, Voices for Virginia's Children

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**Mark Mather, Ph.D.**, Population Reference Bureau  
**Rosaria Ribeiro**, National Child Care Information Center  
**Kerri Rivers, MS**, Population Reference Bureau  
**Louise Stoney, MSW**, Stoney Associates  
**Mildred Warner, Ph.D.**, Cornell University  
**National Economic Development and Law Center**

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**Voices for Virginia's Children** is a nonprofit and non-partisan persistent voice of reason in advocating for better lives and futures for children. The Commonwealth's only statewide multi-issue organization advocating for children and youth, Voices promotes sound, far-reaching program and policy solutions. This study was also sponsored by Virginia KIDS COUNT, a program funded by the Annie E. Casey Foundation that is part of a broad national effort to measure the well-being of children at the state and local levels, and use that information to shape efforts to improve the lives of children. [www.vakids.org](http://www.vakids.org)



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**The Ford Foundation's Family Assets Initiative** seeks to promote accountability to low-income parents and children across a number of sectors at the state level; increase engagement and build the leadership capacity of parents and grandparents; promote access to and availability of quality services for families; and build the capacity of state-based child-advocacy organizations to analyze the needs of children and educate and mobilize pragmatic public sector responses to those needs. [www.familyassets.net](http://www.familyassets.net)



# EXECUTIVE SUMMARY

Child care in Virginia is an important social infrastructure that has economic benefits for businesses, government, and workers. Public investments in child care result in immediate economic returns from child care spending in jobs, tax dollars, and increased economic activity. This analysis documents the economic impact of government and private sector investments in child care beyond the more familiar benefits to children and their families.

Child care is a significant economic driver for Virginia’s economy in four main ways:

1. It generates jobs and gross receipts;
2. it enables parents to go to work;
3. it enables employers to attract and retain employees and increase productivity; and
4. it ensures a strong future economy by preparing children to enter school ready to succeed and become productive workers.



Child care is a sizable and expanding industry, comprised of over 17,000 small and medium sized businesses. In its own right, child care is a significant job-creating and income-generating sector.

**Child care employs at least 30,000 people.** More people are employed in child care than in either elementary/secondary education or higher education. Six times more Virginians work in child care than in cigarette manufacturing (Table 1).

Table 1. Employment in Various Virginia Industries	
Cigarette Manufacturing	5,000
Higher Education/ University	20,000
Elementary/Secondary School	21,000
Child Care	30,000
Insurance	32,000
Legal Service	32,000
Postal	34,000
Truck transportation	36,000

**Child care generates \$1.46 billion in gross receipts,** which is more than elementary/secondary education or higher education (Table 2).

Table 2. Gross Receipts for Various Virginia Industries		
Elementary/Secondary School	739.0	million
Higher Education/ University	931.0	million
Child Care	1.4	billion
Postal	2.8	billion
Legal Service	3.4	billion
Truck transportation	4.6	billion
Insurance	5.6	billion
Cigarette Manufacturing	11.0	billion

While the direct employment and receipts of the child care industry account for an important part of the Virginia economy, **the industry also has a ripple effect throughout the economy.** Those ripple effects can be summarized by indirect and induced effects. Indirect effects are generated because there are many industries supporting child care. Money received by child care firms will be used to purchase child care center supplies and services such as real estate or transportation. Without the child care industry, the

ancillary industries will see a drop in their revenues. This effect is called the indirect effect. The induced effect is caused by the income of workers employed by the child care industry. More receipts indicate that more workers will be hired. These newly hired workers will in turn increase their consumption, thus injecting more money into Virginia's economy.

Investment in the child care industry is a smart business strategy. **Virginia's child care industry enables more than 291,000 parents to be employed.**

**The child care industry** impacts a variety of other industries and **has a total value of \$2.51 billion** (Figure 1).

Child care investment provides an opportunity for employers to improve recruitment, reduce turnover, lower absenteeism, and bolster productivity. For example, Westminster Canterbury, an adult retirement community in Richmond, Virginia, offers on-site child care as a benefit. The company averages 12-14% turnover rates annually for all full-time employees, a dramatic contrast to same-industry averages that range up to and beyond 100%.

High quality child care is one of the most potent contributors to the healthy development of young children so they are ready to enter school and succeed. The preponderance of scientific evidence indicates that school readiness is directly related to school success and therefore to the strength of the future workforce. High quality child care

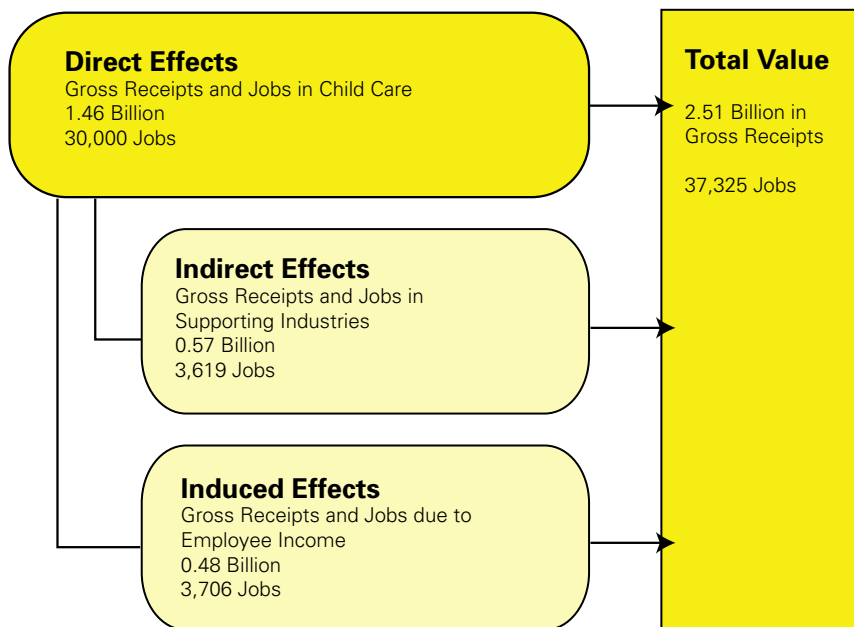
offers an additional financial return by reducing future public spending in such areas as criminal justice, remedial education, unemployment, and welfare spending.

Challenges of the child care industry include:

- the high cost of quality child care for parents
- the difficulty of attracting and retaining a well-educated child care workforce given the low wages of the field.

In addition to its intrinsic human development value, **the child care industry merits investments from the public and private sector based on the strength of its impact on the economy.**

Figure 1: Total Economic Impact of Child Care in Virginia



# CHILD CARE INDUSTRY IN VIRGINIA: A SIGNIFICANT ECONOMIC DRIVER

## Introduction

Child care in Virginia is an important social infrastructure that has economic benefits for businesses, government, and workers. Public investments in child care result in immediate economic returns from child care spending in jobs, tax dollars, and increased economic activity. This analysis documents the economic impact of government and private sector investments in child care in addition to the more familiar benefits to children and their families.

Child care is a significant economic driver for Virginia's economy in four main ways:

1. generates jobs and gross receipts;
2. enables parents to go to work;
3. enables employers to attract and retain employees and increase productivity; and
4. ensures a strong future economy by preparing children to enter school ready to succeed and become productive workers.

Before evaluating the economic impact of the child care industry using a more sophisticated economic model, simply totaling the number of businesses and people served documents that child care is a sizeable industry. Various trends indicate it is expanding as well.

## Establishments

Virginia supports over 17,000 small and medium size child care businesses. These child care establishments, traditionally viewed as disparate entities, can in the aggregate be appreciated as more than 17,000 small and medium size businesses.

The majority of child care establishments in Virginia, 80%, are home based family child care businesses. In fact, 13,571 self-employed family child care providers

To highlight the educational benefits of the industry, the generally preferred term for programs referred to in this report is *early care and education*. However, the term *child care* is used here because it is likely more familiar to the reader and it is shorter. For the purpose of this report, the term *child care* is defined as care and education programs of licensed child care centers, religious institutions exempt from licensure, state licensed family child care day homes, locally permitted family child care day homes, voluntarily registered family child care day homes, and unregulated family child care day homes listed on tax returns. <sup>1, 2</sup>

pay taxes as sole business proprietors.<sup>3</sup> Although the majority of child care establishments are home businesses, the majority of children are served in licensed child care centers.

## Types of Child Care Establishments

**Licensed Child Care** - The Virginia Department of Social Services licenses child care facilities according to state laws and regulations. Providers must meet specific standards to obtain and maintain a license. <sup>4</sup>

**Religious Institutions Exempt from Licensure** – Religious institutions are not required to be licensed or registered by the state.

**Regulated Family Child Care Day Homes**- Family child care day home regulation requirements vary depending on the number and age of children. Homes can obtain a state license, local permit, system approval, or registration. <sup>5</sup>

**Unregulated Family Child Care Day Homes**– Family child care day homes that are not subject to state licensure or registration are unregulated. There are no requirements for unregulated care. <sup>6</sup>

## Children Served

At least 285,000 children are served in Virginia's child care industry (table 3). It is difficult to determine the exact number of children served in child care because enrollment data, which would vary on a daily basis, are not available in Virginia. The number of licensed child care slots is available. The number of slots, the maximum capacity in licensed programs, is based on square footage of the facility. However, most child care establishments are not filled to their maximum legal capacity, sometimes due to unwanted vacancies; sometimes intentionally, for example, to improve the quality of the program. A recent study of Virginia child care data found that child care centers have an average vacancy rate of 25.9%. Therefore, the number of children served was calculated by multiplying the child care capacity by 74.1% (table 3).<sup>7</sup> According to this estimate, the Virginia child care industry can serve more than 22% of all Virginia children ages 0-12 at any one time.

Trends in employment and population point to an expanding industry.

The youngest segment of Virginia's population, children ages 0-4, has increased 6.3% from 2000-2003. This rise is the 8th largest increase among states.<sup>8</sup>

Table 3. Child Care Establishments in Virginia			
Types of Child Care Establishments in Virginia	Number of Establishments	Capacity (Possible number of children)	Number of Children Served
Licensed Child Care Centers	2,640	232,717	172,443
Religious Institutions Exempt from Licensure	929	74,300	55,056
Family Child Care Day Homes (voluntarily registered, licensed, permitted, system approved and locally approved)	6,019	40,722	30,175
Unregulated Family Child Care Day Homes	7,552	37,760	27,980
Total	17,140	385,499	285,654

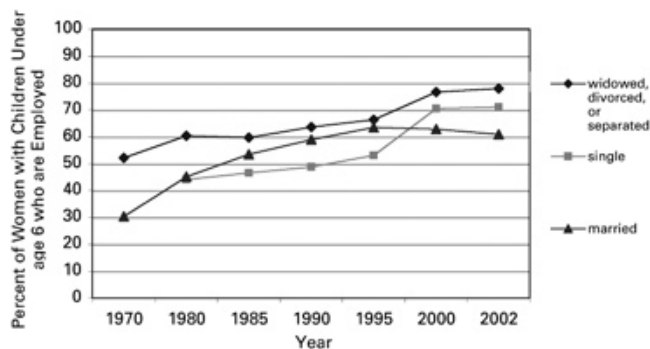
Source: Virginia Department of Social Services 2004 Licensing Data and U.S. Census Nonemployer Statistics, 2001

Children ages 0-12 comprise 18% (1,278,866) of Virginia's total population, which is 7,293,542.<sup>9</sup>

In addition, the demand for child care has increased as more women with children and single parents have entered the labor force. Figure 2 shows a national increase in the percent of employed women with young children from 1970 to 2002. In Virginia, 68% of women (253,000) and 85% of men (241,000) with children under age 6 are employed.<sup>10</sup>

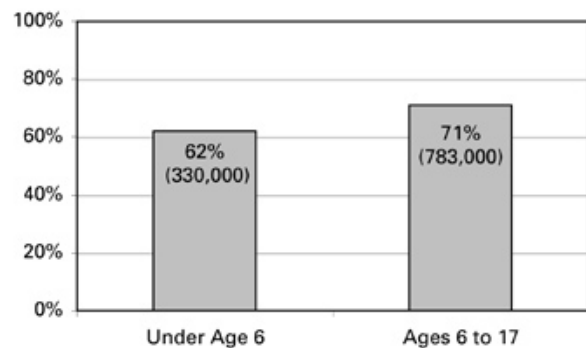
According to the 2000 Census approximately 330,000 children under age 6 and 783,000 children ages 6 to 17 have all of their care giving parents in the labor force in Virginia (figure 3). This means that in a two-parent family both parents are in the labor force, and in a single-parent family, the single parent is in the labor force.

Figure 2. National Employment Status of Women with Children Under age 6 by Marital Status: 1970-2002



Source: Statistical Abstract of the United States No. 597. US Bureau of Labor Statistics, Bulletin 2340; and unpublished data.

Figure 3. Percent of Children in Virginia with All Parents Working



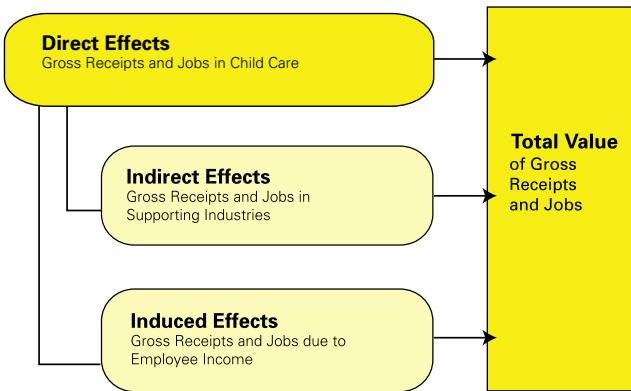
Source: Population Reference Bureau, analysis of data from U.S. Census Bureau, 2000 Census Summary File 3, Tables PCT70A-G and P46



# THE ECONOMIC IMPACT OF THE CHILD CARE INDUSTRY

While the numbers above justify considering child care as a bona fide industry which is expected to grow over the next several years, such a simple description does not capture the economic impact of the industry, a much more significant analysis of economic importance. The economic impact of an industry is derived from an estimation of the direct, indirect, and induced economic effects of that industry (figure 4).

Figure 4. A Model to Determine the Economic Impact of the Child Care Industry



## Estimating the Direct Economic Effects of the Child Care Industry

In its own right, child care is a significant job-creating and income-generating sector. To assess the economic impact of the child care industry, the first steps are to estimate the number of jobs and the annual gross receipts of this industry. Based on gross receipts, the total linkage effect of the child care industry can be evaluated. For example, it was estimated that child care is a \$500 million industry in Kansas and a \$4.7 billion industry in New York State. How big is the direct economic impact of the child care industry in Virginia?

## Workforce

At least 30,000 people are employed in the child care industry (table 4). The child care workforce was calculated by IMPLAN, which is an economic impact assessment modeling system. More people are employed in child care than in the two other education sectors, elementary/secondary education and higher education. Six times more Virginians work in child

care than in cigarette manufacturing (table 4).

Industry	Employment
Cigarette Manufacturing	5,000
Higher Education/ University	20,000
Elementary/Secondary School	21,000
Child Care	30,000
Insurance	32,000
Legal Service	32,000
Postal	34,000
Truck transportation	36,000

## Gross Receipts

Child care is a \$1.46 billion industry in Virginia. To estimate the gross receipts of the child care industry, two essential pieces of information are needed. One is the average price charged for each type of service provided by Virginia's child care establishments. Those services include infant care, toddler care, and before and after school care for school-aged children. The number of children receiving each type of service is also needed to perform this analysis.

Table 5 lists the average weekly rate for different types of child care services at licensed centers, religious centers, and family homes. Their prices on before and/or after school services are similar to each other. Prices for infants, toddlers, and pre-school children at licensed centers are consistently higher than at religious centers or family providers.

	Licensed Centers	Religious Exempt Centers	Family Providers
Infants	\$159	\$117	\$108
Toddler	\$144	\$110	\$101
Pre-School	\$120	\$91	\$95
School Age	\$117	\$85	\$89
Before School	\$39	\$32	\$37
After School	\$52	\$42	\$45
Before & After School	\$71	\$55	\$61

Source: 2002 Market Rate Survey, Virginia Department of Social Services

The total number of children in licensed centers, religious centers, and family providers is estimated to be 285,653. Virginia does not track the number of children falling into infants, toddler, and pre-school categories. Studies conducted in other states provided some guidance on the distribution of children in each category. For example, both Kansas and North Carolina studies show that pre-school children account for half of all children in child care facilities. For the economic modeling section of this study, the distribution of children receiving each type of service was estimated based on available studies from other states (table 6).

Table 6. Estimated Distribution of Children Receiving Service	
Infants	9%
Toddler	8%
Pre-School	51%
School Age	7%
Before School	6.20%
After School	12.50%
Before & After School	6.30%
Total Number of Children Served	285,653

Combining the two elements together, the estimated annual gross receipts of the child care industry in Virginia are \$1.46 billion. Close to \$1 billion is generated by licensed child care centers alone, while religious centers and family providers each take in over \$200 million in annual receipts (table 7).

Table 7. Estimated Annual Gross Receipts	
Licensed Centers	\$973,918,747
Religious Exempt Centers	\$235,872,477
Family Providers	\$254,748,482
Total	\$1,464, 539, 686

This estimate of gross receipts is consistent with an estimate from an alternative approach. It is estimated that 30,000 child care workers earn an average of \$17,000 per year. This shows that total wage income of Virginia’s child care workers amounts to \$510 million dollars. The IMPLAN model indicates that wages account for 35% of the gross receipts of the child care industry. This also gives an estimate of 1.6 billion dollars.

## INDIRECT AND INDUCED EFFECTS OF CHILD CARE INDUSTRY

While the direct employment and receipts of the child care industry account for an important part of the Virginia economy, the industry also has a ripple effect throughout the economy. Those ripple effects can be summarized by indirect and induced effects. Indirect effects are generated because there are many industries supporting child care. Money received by child care firms will be used to purchase child care center supplies and services such as real estate or transportation. Without the child care industry, the ancillary industries will see a drop in their revenues. This effect is called the indirect effect. The induced effect is caused by the income of workers employed by the child care industry. More receipts indicate that more workers will be hired. These newly hired workers will in turn increase their consumption, thus injecting more money into Virginia’s economy.

The IMPLAN model was applied to quantify the link-

age effect the child care industry has on the Virginia economy. Those effects can be summarized by output and employment multipliers. For example, Table 8 shows that the child care industry has an output multiplier of 1.72. This means that one dollar of gross receipts in the child care industry will generate \$1.72 to the state economy. Thirty-nine cents will be spent on industries supporting child care such as those businesses providing suppliers and service to child care centers. Thirty-three cents will be spent on the economy due to an increase in income of people working in the child care industry. The employment multiplier for the child care industry is 1.25, which indicates that one job created in the child care industry can create 0.25 additional jobs in other industries. 0.13 jobs will be created in industries supporting child care, while 0.12 jobs will be created in industries supporting child care workers (table 8).



Table 8. Virginia Child Care Multipliers				
	Direct Impact	Indirect Impact	Induced Impact	Total Multipliers
Employment	1	0.13	0.12	1.25
Output	1	0.39	0.33	1.72

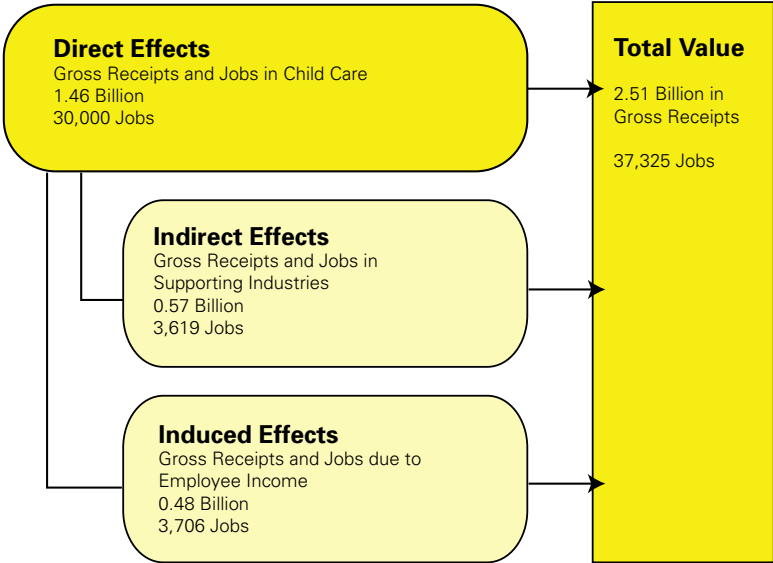
Source: IMPLAN 2001 Version

The overall annual economic impact of the child care industry in Virginia is estimated at \$2.51 billion. \$1.46 billion comes from direct receipts, while over \$1 billion is derived from indirect and induced economic impacts. In terms of job creation, the child care industry in Virginia employs about 30,000 workers, and it supports another 7,300 jobs due to linkage effects. The total economic impact can be summarized in figure 5.

### Industry Ranking of the Economic Impact<sup>13</sup>

Not every industry in Virginia will benefit equally from the child care industry. Some industries, such as rail transportation and highway construction, have no linkages with child care and will receive no economic impact. Other industries will see significant contribution to their gross receipts thanks to the child care industry. For example, the child care industry contributes \$109 million to the gross receipts of Virginia’s real estate industry, and more than \$50 million to Virginia’s restaurant and food industry. Other industries that benefit most from the indirect and induced effect of child care include wholesale trade, maintenance and repair of nonresidential buildings, hospi-

Figure 5. Total Economic Impact of Child Care in Virginia



tals, and financial institutions. In fact, out of the more than 500 different industries and sectors, the top 10 beneficiaries enjoy 40% of the benefits of the child care industry, while the rest share the remaining 60% of the ripple effect of the child care industry. Table 9 lists the industries that benefit most from Virginia’s child care industry.

Table 9. Top Beneficiaries of Child Care Industry-Output	
Real estate	\$109,273,877
Wholesale trade	\$56,758,639
Food services and restaurants	\$51,131,307
Owner-occupied dwellings	\$40,545,586
Maintenance and repair of nonresidential buildings	\$26,375,508
Hospitals	\$26,303,009
Offices of physicians- dentists- and other health	\$25,781,617
Power generation and supply	\$24,159,860
Monetary authorities and financial institutions	\$24,026,310
Automotive repair and maintenance- except car wash	\$23,258,426

Food services and restaurants	920
Real estate	472
Wholesale trade	263
Employment services	214
Maintenance and repair of nonresidential buildings	210
Offices of physicians- dentists- and other health	182
Hospitals	162
Cattle ranching and farming	160
General merchandise stores	151
Food and beverage stores	140

In terms of jobs created, table 10 shows that the largest beneficiary is food services and restaurants, even though its total value benefit ranks third (table 9). This is because this industry has a much lower wage rate than real estate or wholesale trade. As a result, a smaller dollar benefit can support more jobs. The opposite is true in financial institutions and power generation, which are top beneficiaries in terms of output impact. However, the employment impacts for these industries are smaller than the impact of industries such as general merchandise stores or grocery stores due to relatively higher wages of the finance and utility industries. The top 10 industries account for 38% of the total jobs created thanks to Virginia's child care industry.

## CHILD CARE INVESTMENT AS A BUSINESS STRATEGY

### A Valuable Benefit for Employers and Employees

Virginia's child care industry enables more than 291,000 parents to be employed. Child care is a vital part of the infrastructure that supports working parents who contribute to Virginia's economy. The actual number of parents who benefit can only be estimated. More than 291,000 parents elected the dependent care tax credit on their 2001 tax returns.<sup>14</sup> This credit (\$3,000 for one dependent and \$6,000 for two or more) is available to people who, in order to work or to look for work, have to pay for child care services for dependents under age 13.

This is a very conservative estimate of the number of parents who are served by the child care industry since this figure does not include parents whose income is so low they do not pay income taxes or parents who have elected to establish a pre-tax account with their employer instead of the dependent care tax credit.

Working parents who rely on child care collectively earn at least \$7.4 billion. (291,000 working parents x \$25,357 median pay in 1999<sup>15</sup> in Virginia = \$7,378,887,000)

An inadequate child care industry hurts employees and employers. Employees who have difficulty finding quality, affordable child care may miss work, be less productive, or, in extreme cases, result in turnover costs for the employer if the employee must quit.

- A recent national survey reported that 22% of unscheduled absences are due to family issues, which include child care problems.<sup>16</sup>
- Unpaid child care is often unreliable, which may cause parents who depend on such informal providers to miss work.
- *The Journal of Accountancy* reported an estimated turnover cost for one employee at 93%-200% of the employee's annual salary depending on the employee's skill level.<sup>17</sup> A compilation of turnover cost studies found a cost between \$3,637 and \$25,000 to replace an \$8.00 per hour front line employee; the average cost was \$9,213.<sup>18</sup>
- If quality, reliable child care were more affordable and accessible, parents who currently use unpaid child care might select the typically more stable paid child care.



Some employers invest in child care to help their bottom line. In a work/life benefit study of 975 major U.S. employers, 95% of employers offered some type of child care assistance.<sup>19</sup> These child care benefits included dependent care spending accounts (94%), child care referral services (42%), sick child care (13%), and on-site child care (10%). The majority of businesses with referral services contracted with child care referral agencies instead of providing the service in-house.

Child care investments provide opportunities for employers to improve recruitment, reduce turnover, lower absenteeism and bolster productivity.

- One study found that 42% of employees at companies with on-site child care had sought and accepted employment because of the availability of child care.<sup>20</sup>
- Carilion Health System in southwest Virginia reports positive recruitment and retention due to their child care benefits. Carilion subsidizes 25% of child care fees for employees at multiple center locations and 30% of sick child care costs where offered through their partner vendor.<sup>21</sup>
- A study by Circadian Technologies, Inc. reported a \$300 per employee annual savings associated with decreases in absenteeism when extended-hour child care was made available.<sup>22</sup>

- About 95% of job applicants at Neuville Industries in North Carolina were drawn by its on site child care center. The plant employees increased productivity which allowed the plant to utilize 12% fewer employees. In addition, turnover was only 8%, which was better than the industry rate.<sup>23</sup>
- A favorable, family-friendly public image can attract and retain a highly skilled labor pool. Bon Secours Richmond Health System advertises their inclusion in *100 Best Companies for Working Mothers* and their family-friendly benefits to attract skilled workers. In addition, one study reported a 5% increase in the stock price of companies immediately after the announcement of their inclusion in *100 Best Companies for Working Mothers*.<sup>24</sup>

In response to questions about the benefits of their on-site child care center, Bill King, Vice President of Sales & Marketing at Westminster Canterbury, an adult retirement community in Richmond, VA, responded:

“The first is the obvious benefit to parents of young children. Besides having their children cared for on site, Westminster Canterbury provides an employee discount from the market rate charged to non-employees.

Second is the residual benefit that accrues from creating and supporting a culture of caring within the organization. The child center sends a powerful positive message to all employees, that the corporation is concerned about moms and dads who work here and is supportive of their roles as parents.

Westminster Canterbury averages about 12-14% turnover rates annually for all full-time employees. That contrasts dramatically with averages within this industry that range up to and beyond 100%.”

## Investments in Child Care—Strategies to Improve the Bottom Line

### **Create Flexible Spending Accounts**

Employers can help employees afford care by creating flexible spending accounts. Employees can put up to \$5,000 of their earnings in the pretax account. Both the employer and employee realize a tax savings from the pretax account. <sup>25</sup>

### **Publicize Tax Credits**

The Federal Government and Virginia offer a Child and Dependent Care Tax Credit. Also, employers who build a licensed child care center for use by their employees may be eligible for a tax credit. <sup>26</sup>

### **Publicize Child Care Subsidy Program Information**

Employers can notify low-income employees of the availability of child care subsidies. Eligibility information and applications can be found on the Virginia Department of Social Services website: [www.dss.state.va.us/family/childcare.html](http://www.dss.state.va.us/family/childcare.html)

### **Partner With a Nearby Child Care Center**

Community leaders in Dickenson County believe their new state-of-the-art child care center will attract companies to their area and aid economic development. <sup>27</sup> Fairfax County's web site makes it easy to find child care resources, including a list of businesses that provide on-site child care.

# CHILD CARE INVESTMENT AS AN ECONOMIC DEVELOPMENT STRATEGY

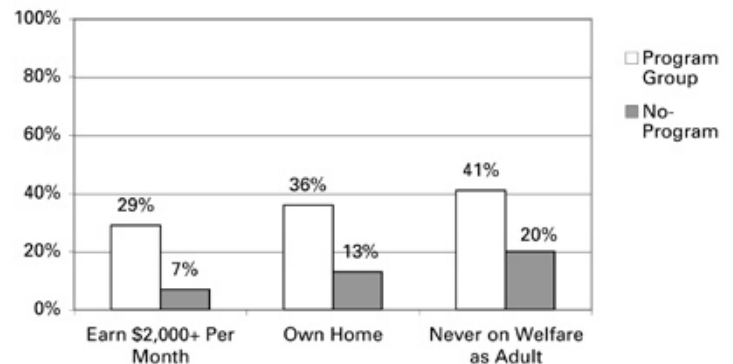
## Opportunities and Challenges

The preponderance of scientific evidence shows that high quality child care is a crucial contributor to school success. Virginia will need to stay competitive and provide skilled workers in order to appeal to the high-paying industries targeted by Virginia's Planning Council, which include biotechnology, information technology, and telecommunications.<sup>28</sup> Virginia has already experienced a shift away from manufacturing jobs toward management and professional occupations, including services. When their manufacturing jobs end, many employees are stymied by their low education level from successfully competing for comparably paying jobs in growing sectors. Although Virginia ranks 3rd among states in aggregate workforce education, it ranks 44th in education level for the manufacturing workforce.<sup>29</sup> In addition, more than 1 in 6 Virginia adults does not have a high school diploma.<sup>30</sup> Investments in high quality child care help prepare the future workforce for employment.

## Child Care Investment Presents Opportunities to Shape the Future Workforce

High quality child care yields economic returns and prepares the workforce of tomorrow for success. Researcher Art Rolnick and economist Rob Grunewald of the Federal Reserve Bank of Minneapolis analyzed investments in Perry Preschool, a high quality early childhood program serving at-risk children, and found an extraordinarily high internal rate of return of 4% for participants in the preschool program, 12% for the public, and 16% overall.<sup>31</sup> Another review of Perry Preschool reported a \$7.00 return for every \$1.00 invested.<sup>32</sup> In addition, Perry Preschool participants were more likely than non-participants to own their own home, remain off welfare, and earn at least \$2,000 per month (figure 6).

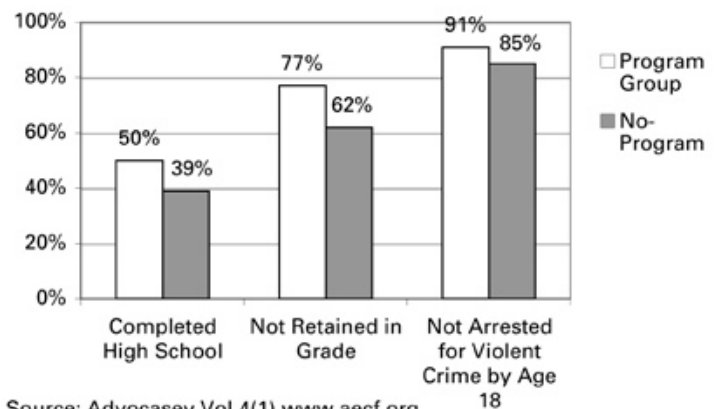
Figure 6. High Scope Perry Preschool Findings, Age 27



Source: High/Scope Educational Research Foundation [www.highscope.org](http://www.highscope.org)

Other high quality child care programs for at-risk children have shown similar benefits. The Chicago Child-Parent Center preschool component yielded an estimated return of about \$7.14 for every \$1.00 invested based on lower public costs for remedial education, reduced justice system expenditures, and increased wages and taxes for participants. In addition, program participants, who were some of the poorest children in Chicago, were more likely to graduate from high school than their non program peers (figure 7).

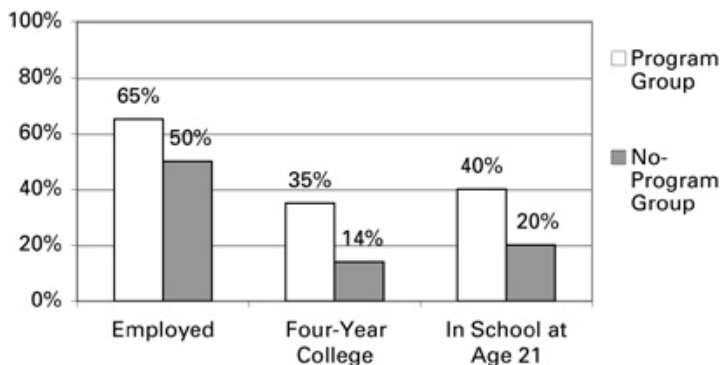
Figure 7. Chicago Child-Parent Center Findings, Age 20



Source: Advocasey Vol.4(1) [www.aecf.org](http://www.aecf.org)

The Abecedarian project, a longitudinal study of high-quality, educational child care, in Chapel Hill, NC, yielded \$4.00 for every \$1.00 invested.<sup>34</sup> Participants at age 21 were more likely than non-participants to be employed, attend a four year college, or be in school (figure 8).

Figure 8. **Abecedarian Findings, Age 21**



Source: The Carolina Abecedarian Project, [www.fpg.unc.edu](http://www.fpg.unc.edu)

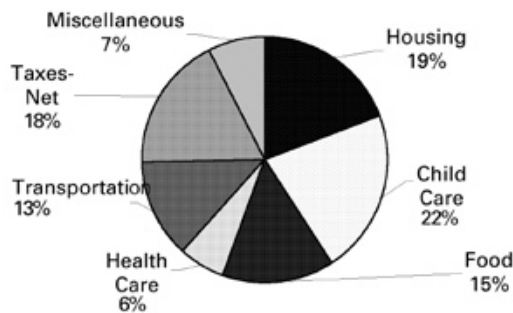
Investments in quality child care are likely to result in public education cost savings. Studies have shown that at-risk children who participate in high quality educational child care programs that prepare them for school are less likely to be retained or need special education services.<sup>35</sup> Approximately 11,960 Virginia students were retained in grades kindergarten through third grade in the 2002-2003 school year. Virginia's average per pupil expenditure costs in 2002-2003 were \$8,186,<sup>36</sup> which does not include the costs for special education.

## Child Care Presents Challenges for the Workforce

Child care is expensive for parents. Child care comprises a significant portion of a basic family budget. As figure 9 shows, a family with 2 adults and 2 children will spend 22% of their budget on child care in Norfolk, which is even more than they will spend on housing (19%) or food (15%). These data are available for 134 localities in Virginia.

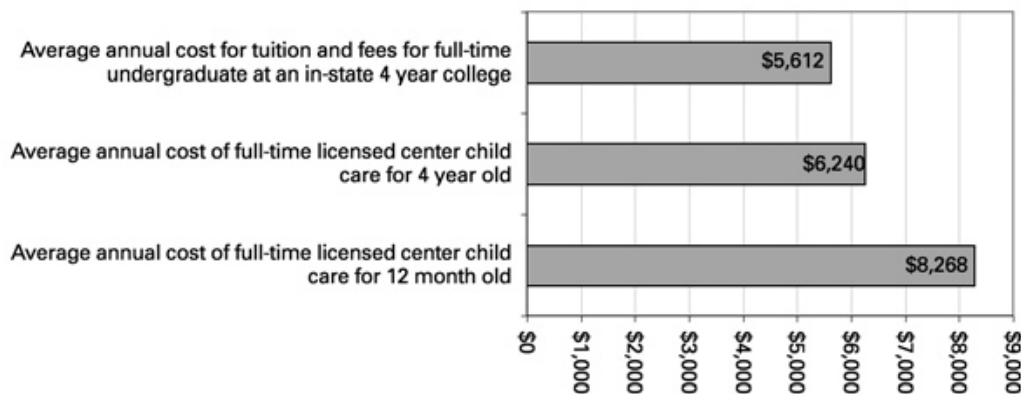
The average annual cost for full-time licensed center child care for a 4 year old was \$6,240, and the average annual cost of licensed center child care for a 12 month old was \$8,268 in 2002 (figure 10). In contrast, the average annual cost for tuition and fees for a full-time undergraduate at an in-state 4 year college is \$5,612 for the 2004-2005 school year.<sup>37</sup> Families with college age children have had time to save money and usually earn more than younger families who purchase child care.

Figure 9. **Percentage of Income Needed to Meet Basic Needs, 2 Adults, 1 Infant, and 1 Preschooler, Norfolk, Virginia**



Source: The Self-Sufficiency Standard for Virginia, 2002

Figure 10. **Virginia - Cost of Child Care vs. Higher Education**



Source: 2002/2003 State Council of Higher Education for Virginia and 2002 Market Rate Survey, Virginia Department of Social Services



The usual high cost of quality child care drives many parents to seek out lower cost and lower quality care, which often impacts their own stability and productivity as employees. The high cost also drives some employees to leave employment if their family can afford for them to do so, even if they would prefer to be employed. The stress of finding and paying for quality care impacts other aspects of work performance as well.

The child care workforce is low paid. The average income for child care workers in Virginia, \$17,230, is well below the average income for all occupations in Virginia, which is \$38,567 (figure 11).<sup>38</sup> Workforce investment goals typically support jobs that pay self-sufficient wages. Self-sufficiency is defined as a wage that enables a person or a family to purchase basic necessities (housing, food, transportation, child care) and pay taxes without public or private assistance. A child care professional making the average state income for a child care worker, \$17,230, would only be able to support himself or herself and a child in 3 of the 134 Virginia localities.

In addition to low wages, studies have reported a turnover rate of 30% for child care professionals<sup>39</sup> and a thin profit margin.<sup>40</sup> It is hard to attract and retain the qualified child care workforce that is essential in order to provide high quality programs.



Figure 11. **Virginia Occupational Employment and Wage Estimates**

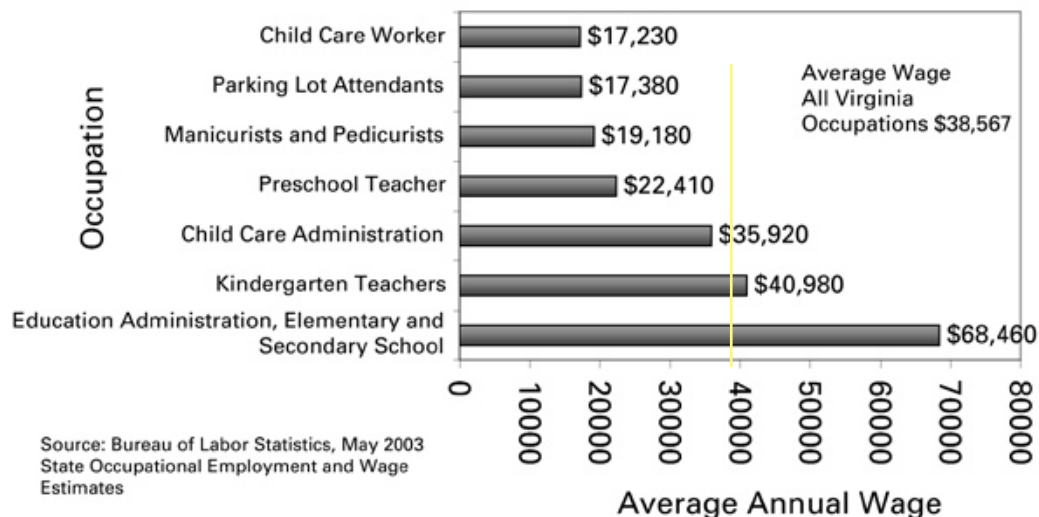
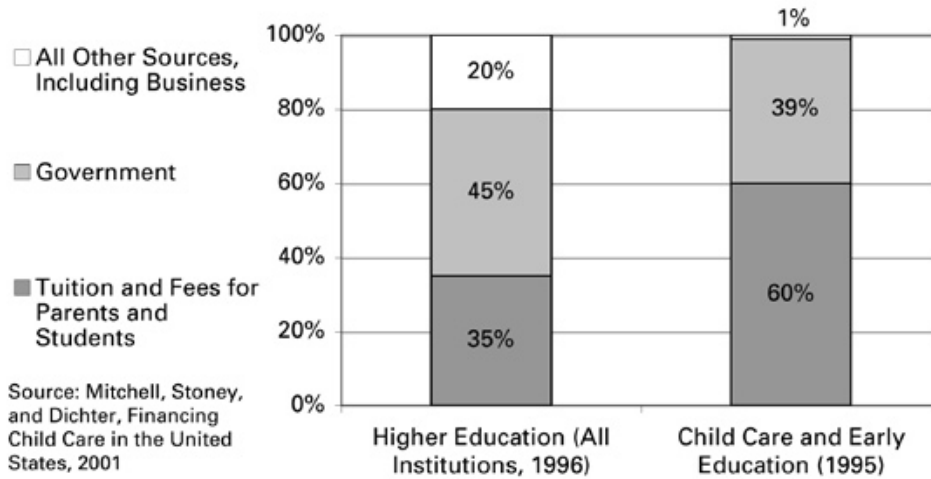


Figure 12. **Major Revenue Sources for Higher Education and for Child Care and Early Education**



## Economic Impact of Public Investments in Child Care

Child care investments stimulate and support Virginia's economy. However, the challenges to high quality child care include the high costs faced by parents and the child care workforce's low wages, which make it difficult to attract and retain staff. Public investment in child care will produce a healthy economic return with the added benefits of producing a better educated future workforce and enabling parents to go to work.

Government subsidies and scholarships help ease the burden of higher education tuition costs. As figure 12 shows, families of young children shoulder 60% of the costs of child care while families of youths in higher education pay only 35%.<sup>41</sup> Although these figures are from the mid-nineties, the percentages are still accurate. The State Council of Higher Education's goal for 2004-2006 is for in-state students to bear 33% of the cost of college and for the state to pay the remaining 67%.<sup>42</sup>

Funding for child care initiatives in Virginia totals more than \$300 million. This includes the USDA food program, Head Start, Early Head Start, and Title I which are federally funded; the Child Care Development Block Grant (child care subsidies and quality initiatives), which is federally funded with a partial state match; and the Virginia Preschool Initiative, which is state and locally funded.

Virginia's child care subsidy program makes it possible for parents with children to work or receive training in order to become self-sufficient. At least 93% of the families receiving subsidies in Virginia are employed.<sup>43</sup> Child care subsidy payments amounted to \$122 million in 2004 (SFY) and served 58,000 children. Due to insufficient funding, only 7% of Virginia families eligible by federal guidelines receive subsidies; the national average is 16% of eligible families.<sup>44</sup>

# POLICY RECOMMENDATIONS

In addition to its intrinsic human development value, the child care industry merits investments from the public and private sector based on the strength of its impact on the economy.

- ✿ **Secure funding for better data collection on the child care industry in Virginia.** The public and private sectors need to support this effort.
- ✿ **Identify corporate champions who will promote the child care industry as critical to Virginia's economy.** David Lawrence, Jr., former Publisher of the *Miami Herald* and recipient of five Pulitzer prizes for journalism, became an advocate for early care and education after retiring and has been a strong force in early childhood issues in Florida. He has spoken to groups all over the United States about the importance of early childhood programs, including Universal Pre-K. [www.teachmorelovemore.com](http://www.teachmorelovemore.com)
- ✿ **Enlist business and government support in promoting the link between child care and economic development.** Art Rolnick and Rob Grunewald of the Federal Reserve Bank of Minneapolis have been speaking widely about the importance of quality early childhood programs and their position that investing money in early childhood programs is one of the best forms of economic development a community can make. They have had major impact in Minneapolis and Minnesota as well as on other cities and states through their national speaking engagements. [www.minneapolisfed.org](http://www.minneapolisfed.org)

- ✿ **Create a child care business task force to advocate for child care and its link to economic development.** Business concerns such as The Business Roundtable and corporations including Marriott International, AOL Time Warner, IBM, Pfizer, JP Morgan Chase and Merrill Lynch have formed Corporate Voices for Working Families (CVWF), a coalition to advance issues that help working families including the availability of pre-kindergarten for all children. [www.businessroundtable.org](http://www.businessroundtable.org) and [www.cvworkingfamilies.org](http://www.cvworkingfamilies.org).
- ✿ **Support programs for child care professionals that will enable them to earn a self-sufficient wage.** Initiatives such as Child Care WAGE\$ in North Carolina have linked financial incentives to additional education and retention in the field of child care. Evaluative data suggest that Child Care WAGE\$ is associated with increased incomes and has influenced child care professionals to stay in their jobs. [www.childcareaservices.org](http://www.childcareaservices.org).

# ENDNOTES

1. For more information regarding state regulation see the Virginia State Code <http://leg1.state.va.us/000/src.htm>
2. Because no reliable data exist, estimates are not provided for unregulated, informal child care provided by family, friends and neighbors who either do not receive payment for their services or who do not pay taxes as a result of income earned from child care. Also excluded: Head Start, and Department of Education providers, unless licensed. Furthermore, child care capacity by age of child is not available in Virginia. The Technology Advisory Team did not feel comfortable creating estimates; thus, national data sources and IMPLAN estimates are used in the demographic sections of this report.
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26. Virginia Economic Development Partnership, *Business Incentives, 2003-2004*, p. 5 <http://www.yesvirginia.org/pdf/guides/businset.pdf> Accessed 9/10/04. Also, Virginia Department of Taxation website <http://www.tax.state.va.us/site.cfm?alias=TaxCredit#day>

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**Voices for Virginia's Children**

701 East Franklin Street, Suite 807

Richmond, VA 23219

(804) 649-0184

[www.vakids.org](http://www.vakids.org)