

# Economic and Community Value



**Critchlow Adkins**  
**Children's Centers**  
Building Brighter Futures Since 1970

**Every \$1** spent and retained within the county generates **\$1.88** in economic activity

**\$3.7 million** regional annual impact

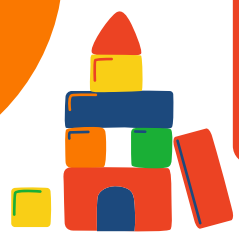
Over **11,750** educated and cared for children tuition assistance totaling **\$100K**

**Every \$1** spent and retained within the region generates **\$2.10** in economic activity

**\$2.2 million** Talbot County annual impact

**40+** community partnerships

Supports **60** jobs regionally



**Supporting Families**

**17 days** of work lost annually by families lacking quality child care

**\$1 million** in wages retained annually from childcare provided

**270** children enrolled in summer camps each year that help prevent summer slide in learning

Future public savings cost per student

**\$50K** in public healthcare costs

**\$33K** in crime related costs

**\$3.7K** in welfare costs

# The Economic and Community Value of



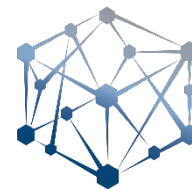
## Critchlow Adkins Children's Centers

Building Brighter Futures Since 1970

2021 Report Prepared by:



2022 Update Conducted by:



SG Insights, llc

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## I. Introduction

Quality child care and early childhood education (ECE) are important economic drivers in any economy. In addition to the economic activity generated by the presence of this industry sector and those that support it, quality child care and ECE enhance the productivity of both the current and future workforce and provide a myriad of long-term benefits to those that they serve. Critchlow Adkins Children's Centers (CACC) provides access to quality ECE in five sites located throughout Talbot County, Maryland. CACC provides quality, affordable preschool, before- and after-school care and summer camp programs to children ages 2-12. Through their financial assistance, CACC is able to provide access to these programs for many families that would otherwise not have access to similar levels of care and education for their children. All programs are licensed and accredited by the Maryland State Department of Education (MSDE) and have the highest Maryland EXCELS Check Level 5 rating. Accreditation by MSDE is not a requirement for child care centers, rather it is a voluntary process and denotes programs that substantially exceed state licensing requirements.

CACC was established as Easton Day Care Center in 1970 and has cared for and educated over 11,750 children over four generations. Nearly half of the families served by CACC receive tuition assistance with approximately \$100,000 of financial assistance given per year, on average, in addition to aid provided through the MSDE Division of Early Childhood Child Care Scholarship Program.

Over the past five years, CACC has served over 300 students each month. Of the five centers, the St. Michaels Site is home to the highest average enrollment. The year-round, full-day, two-year-old, preschool, and wrap around pre-kindergarten programs have seen the highest, steady increase in average enrollment since FY16 with an average monthly enrollment in FY20 of 93 students. The School Age Site (Easton Elementary) of CACC, offers a wrap around pre-kindergarten, as well as before- and after-school programs for children in kindergarten through fifth grade. The Cordova and White Marsh (Trappe) sites offer full-day preschool, before- and after-school care. The Preschool site offers all-day year-round programs for ages 2-4. All sites have summer camp programs.

CACC is a welcoming child care center that engages every child. A priority of CACC has been helping each student acquire a positive self-image through developing social, emotional, physical, and intellectual skills. CACC has helped develop these skills by offering children age-appropriate year-round activities and education. This continuous cycle of care and education is important in preparing preschool children to enter school ready to learn, providing reliable child care for employers, and enabling parents to sustain their current employment to support their families.





CACC positively impacts the community and those it serves in a number of ways. This report breaks down the impact into two overall categories: the economic impact and the community impact of the organization. The economic impact examines the economic activity generated in the local economy through the operation of the organization while the community impact examines the ways in which the work performed by CACC impacts the quality of life of its students, families, and the broader community.



## II. Economic Impact

CACC directly and indirectly impacts the local and regional economy through its operations. The organization generates economic activity through spending to vendors for goods and services that support the operation and through the household income that is paid to CACC employees. Each dollar that is spent and retained in the local economy is available for recirculation (or re-spending) in what is often referred to as a “trickle down” effect. The economic impact of CACC is estimated using the IMPLAN modeling software and a variety of budget and employment information.

The IMPLAN modeling software was used to estimate the economic impact of CACC on the county and regional economy. IMPLAN uses input-output analysis and is widely used in economic impact estimation. The analysis is based on the premise that the economy is composed of many interconnected industry sectors and institutions. Changes in one sector affect the others sectors to which it is connected. The “direct effect” represents the initial change in the industry of interest. This initial economic activity trickles through the economy in the form of “indirect” and “induced” effects. The summation of the indirect and induced effects are often referred to as the multiplier effect.

*Direct effects*- the initial change in the industry of study, in this case, spending by private households, philanthropy, grants, and state and local governments generates a direct impact when it is received by CACC.

*Indirect effects*- additional economic activity generated by spending to local suppliers of CACC for goods and services to support the operations of CACC.

*Induced effects*- changes in local spending that result from income changes in the directly and indirectly affected industries (CACC and vendors of CACC respectively). This is the change in household spending of employees that results from the direct effect.



The economic impact of CACC is examined for two geographic areas in this study. The first is Talbot County where CACC operates all five of its centers. A portion of the vendors that support that operation of CACC are located within Talbot County. Approximately 64% of CACC employees reside within Talbot County which means the majority of their take home pay is likely to be spent and retained within the county. The second geographic area of interest in this study is what is referred to as the “region” which includes Talbot County, Caroline County, Dorchester County, and Queen Anne’s County. A portion of the money that is spent outside of Talbot County is captured by industries in the region. Additionally, the remaining 36% of CACC employees reside in the other three counties of the region. The portion of spending that occurs outside of the region is considered “leakage” or money that leaves the area and is not available for recirculation within the local economy.

The FY22 operating budget of CACC is just over \$2.46 million, over half of which is retained within Talbot County and over 80% of which is retained within the region as a whole. The significance of this spending

within the county increases as the multiplier effect of the expenditures is taken into consideration. Employees and vendors within the county that receive funds from CACC re-spend a portion of those funds within the county and regional economies.

**Talbot County Impact**

The estimated economic impact of CACC within Talbot County is nearly \$2.2 million annually. For every dollar spent and retained within the county a total of \$1.97 in economic activity is generated.

CACC supports 39 jobs in Talbot County. This includes the 30 employees directly employed by CACC that reside in Talbot County and an additional 9 jobs that are supported in the local economy through the economic activity generated by CACC.

**Table 1. CACC Economic Impact in Talbot County**

Impact Type	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
Direct Effect	30	\$1,063,695	\$1,146,500	\$1,109,294
Indirect Effect	3	\$83,326	\$159,844	\$320,681
Induced Effect	6	\$241,874	\$428,911	\$758,605
<b>Total Effect</b>	<b>39</b>	<b>\$1,388,895</b>	<b>\$1,735,255</b>	<b>\$2,188,580</b>

**Regional Impact**

The estimated economic impact of CACC within the region is over \$3.7 million annually. For every dollar of direct spending that occurs within the region a total of \$1.72 in economic activity is generated.

**Table 2. CACC Regional Economic Impact**

Impact Type	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
Direct Effect	47	\$1,605,136	\$1,732,649	\$2,161,292
Indirect Effect	5	\$140,028	\$264,370	\$571,346
Induced Effect	8	\$300,761	\$553,260	\$981,604
<b>Total Effect</b>	<b>60</b>	<b>\$2,045,924</b>	<b>\$2,550,279</b>	<b>\$3,714,243</b>

Within the region, CACC supports a total of 60 jobs. This includes the 47 employees directly employed by CACC that reside within the region and an additional 13 jobs that are supported in the regional economy through the economic activity generated by CACC.

### III. Community Impact

The overall impact of CACC goes beyond the economic impact generated by the spending to support the operation of the organization. There are a variety of ways CACC programs provide both immediate and long-term benefits for the local economy and community that can be more difficult to quantify, but are nonetheless important to consider. This section of the report will provide insight into the impacts on the current workforce, tomorrow's workforce, children's health, the public sector, and community partnerships.

“The future for Courtney, a single mother raising two active preschoolers on her own...was uncertain. The cost of childcare was so high that even though she worked full-time, Courtney struggled to pay her bills.

Looking for good childcare, Courtney found Critchlow Adkins Children's Centers and with the help of the tuition assistance program, was able to enroll both of her children.”

#### Current Workforce

Working parents are a critical component of the economy. In Talbot County, approximately 93% of families with their own children under the age of 6 years in the household have at least one parent in the workforce. Of families with children under 6 years, 71% have all available parents in the labor force (this includes married-couple families with both parents in the labor force as well as female or male householders that have no spouse present and are in the workforce).

Approximately 69% of females age 20 to 64 years with their own children under 6 years old are in the workforce while a total of 81% of females age 20 to 64 with their own children under 18 years old are in the workforce (U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates). The programs provided by CACC are essential to working parents throughout Talbot County and the region.

Access to quality, reliable child care is one of the most significant obstacles parents face in their ability to enter and remain in the workforce. When quality, reliable child care is unavailable, the impacts are felt throughout the economy. Child care disruptions can limit parents' and caregivers' ability to be productive members of the labor market and economy. Impacts to workforce productivity due to lack of quality, reliable child care can be categorized as short-term disruptions and long-term disruptions. Short-term disruptions include situations such as missing work, arriving late to work, or leaving work early due to self-limited situations such as child illness, weather or holiday-related closure of child care facilities, and occasional behavioral issues. Long-term disruptions include situations such as quitting a job, termination from a job, refusing a job promotion, and limiting employment to part-time rather than full time due to systematic child care issues<sup>1</sup>.



<sup>1</sup> Talbert, E. M., Bustamante, A. B., Thompson, L. J., & Williams, M. E. (2018). Counting Our Losses: The Hidden Cost to Marylanders of an Inadequate Child Care System. Maryland Family Network. Retrieved from:





In a 2018 study conducted by the Maryland Family Network<sup>1</sup>, nearly 50% of working Maryland parents with children age 5 and under reported short-term disruptions to employment over a three-month period due to issues with child care and 14.7% reported long-term disruptions in the past year. Approximately 1 in 12 Maryland parents with children 5 and under had to reduce the number of hours they worked from full-time to part-time; approximately 1 in 23 parents did not accept an opportunity to increase their hours from part-time to full-time; and approximately 1 in 13 turned down a promotion specifically due to issues with child care. Furthermore, nearly 1 in 4 (25%) of working Maryland parents with children age 5 and under reported forgoing additional education opportunities due to issues with child care. The opportunity cost for those Maryland parents foregoing furthering their education was estimated at \$2.34 in 2016 which includes lower wages and the associated lower spending and tax revenues.

“The before/aftercare program allows my husband and I to continue to work full time and brings a reliable routine to OUR busy schedules as well.”

CACC operates on the belief that every family deserves quality child care regardless of their financial situation. To this end, they have taken several measures to ensure that access to the high quality of care they provide is open to families of all socio-economic backgrounds. CACC has maintained the lowest tuition rates in the county and has been providing tuition assistance to qualifying families for 50 years. To date, CACC has given approximately \$2.75 million in tuition scholarships with total scholarships averaging \$100,000 per year. The tuition assistance program provides scholarships to families who do not qualify for assistance through the MSDE Division of Early Childhood Child Care Scholarship Program, but do meet the CACC eligibility requirement which is based on the number of people in a home or household with an income level of less than \$53,000 and parents who are employed or enrolled in school.

**\$100K**  
In annual tuition assistance

“If we did not have this resource in our little country community for working families then our lives would change. For those of us that work shift work and have to be at work at seven am ...who would take care of the children? For the working parent that needs to be across the bridge at eight am..... How would the child get himself on the bus when he is only five and there is no one else at home? There is no amount of “thanks” or money that this staff can be given for the job that they do with these young minds.”

While the median family income in Talbot County is approximately \$83,627, the income distribution is wide and the financial burden of child care is heavy. Nearly 28% of families in the county have income below \$50,000 and 10.1% of families with children under the age of 5 had income below the poverty level in 2018<sup>2</sup>. If the cost of child care keeps these parents out of the workforce, their ability to pull themselves out of poverty is nearly non-existent. A key to breaking the cycle of poverty in low income families for future generations is ensuring that children in these families are well prepared to continue their learning in school and seek opportunities for advancement in the future.

[http://www.marylandfamilynetwork.org/wp-content/uploads/2018/04/MarylandFamilyNetwork\\_Countingourlosses\\_FullReport\\_Hyperlinked\\_Singles.pdf](http://www.marylandfamilynetwork.org/wp-content/uploads/2018/04/MarylandFamilyNetwork_Countingourlosses_FullReport_Hyperlinked_Singles.pdf)

<sup>2</sup> U.S. Census Bureau, American Community Survey 5-Year Estimate, 2018



For a family of four with two adults and two children (one infant and one toddler) the average annual cost of child care in the county is approximately \$20,040<sup>3</sup>, approximately 24% of the family income<sup>4</sup>. For families with income below the median, the cost of child care as a percentage of income quickly rises. At a family income level of \$50,000, child care for one infant and one toddler can easily consume over 40% of the family income.

Low income and single parent households are especially vulnerable to the negative impacts of unreliable child care. With income stability often in a delicate balance and a lack of support from another parent when disruptions do occur, the negative consequences can severely and disproportionately impact these families. Of the tuition assistance provided by CACC, approximately 68% provides support to single mothers. Families with single mothers comprise 40% of those served by CACC programs and families with single fathers comprise an additional 3.5%.

“Several years ago, I was homeless and living in a van with my two children. I wanted to work but couldn’t because I needed child care. I had gone to Critchlow when I was little, so I went to them to see if they could help me now. CACC did help. They helped me with tuition and the teachers loved my children so much. They helped me get food when we were hungry and found clothes for my kids when they didn’t have any. It made me feel good knowing my kids were in a safe place. I did get a job, and my family eventually found our way to the area homeless shelter. Last year, the kids and I graduated from the shelter to transitional housing and recently we moved into our first real “home.” For the first time, both of my kids have their own rooms and a yard to play in.

None of this would have been possible without the help we received from CACC.”



Child care issues not only affect the lives of working parents and families but the local economies in which these families live and work. Businesses bear the burden through lost productivity and the costs associated with absenteeism and turnover while the economy also suffers through lost productivity and reduced economic activity generated by parents and families suffering from further constraints on their income. A majority (77%) of parents with children at CACC are employed within Talbot County and an additional 13% of parents are employed elsewhere in the local region. If these families did not have access to the reliable care

provided by CACC the incidence of child care issues they experience would likely increase, the impact of which would be felt throughout the local economy.

Based on a 2017 study by Triton Polling and Research, workers struggling with child care miss an average of nearly 17 days of work, are late an average of nearly 20 days, and leave early an average of approximately 14 days in a year<sup>1</sup>. For many workers, particularly those making hourly pay, this absenteeism can have a significant impact on wages.

**17 Days**  
of missed work, on average,  
annually for employees  
struggling with child care

<sup>3</sup> Assuming both children are enrolled at day care centers rather than in a family child care home

<sup>4</sup> Maryland Family Network (2019). Maryland Child Care Resource Network Child Care Demographics 2019: Talbot County Report. Retrieved from: <http://www.marylandfamilynetwork.org/wp-content/uploads/2019/04/Talbot.pdf>



Access to the programs provided by CACC provide the families they serve with the ability to have reliable care and reduce their absenteeism and turnover related to child care issues. To make a conservative estimate of the wages that are retained by these families through the availability of such child care, it is assumed that all parents and caregivers of children enrolled in CACC programs would be absent from work at the average aforementioned frequency if they did not have access to CACC programs. Furthermore, to keep the estimate conservative it is assumed that these parents/caregivers earn minimum wage and that each instance of tardiness or early leave each equate to one hour of lost pay while a missed day of work equates to eight hours of lost pay. Under these circumstances it is estimated that CACC is able to help families retain nearly \$1 million in wages annually.

Lost household income results in lost economic activity in the county as less money is available for spending on goods and services to meet the needs of the family. Every dollar of lost wage for a working parent because of child care issues results in an estimated \$1.1294 of lost economic activity in the state economy. At the state level, the impact of absenteeism and turnover resulting from child care issues included \$2.41 billion in direct employer costs related to absences and turnover, \$1.28 billion in reduced economic output, and \$117 million in reduced Maryland tax revenue in 2016<sup>1</sup>.

### Tomorrow's Workforce

Children are the future. The future economic success and standard of living for society is based upon the achievements of the next generation workforce. According to James J. Heckman, investing in children in their early developmental years with different programs and tools will produce later success for them as adults in society and in turn also benefit the economy<sup>5</sup>. It is important to provide children with basic knowledge and tools at their early stages of development to ensure each one begins life well.

CACC teachers are highly qualified to provide an exceptional education to their students. CACC holds high standards of excellence for teachers, requires continual professional development, and encourages teachers to complete their degrees. Of the employees at CACC, approximately 44% have earned a college degree. This includes 8 with Associate of Arts degrees, 12 with Bachelor of Science or Bachelor of Arts degrees, and 3 with Master of Arts degrees. An additional 44% of employees have completed one or more 90 Hour Child Care Certification with 16 teachers having completed

“CACC of Cordova, MD has made such a difference in our lives, and the lives of our children. The CACC preschool program has a fantastic curriculum that introduces the fundamentals necessary to help our kids get a head start for Pre-K/kindergarten. The daily activities are gently structured and fun, and have allowed our kids to grow accustomed to the routine and daily schedules that are implemented in the traditional school environment.”

<sup>5</sup> Heckman, J. J. (2006, June 30). Skill Formation and the Economics of Investing in Disadvantaged Children. Retrieved from <https://science.sciencemag.org/content/312/5782/1900.full>

the preschool certification, 1 having completed the school age certification, and another 6 having completed both the preschool and school age certifications. This certification is required to be a Lead Teacher in a child care center.

A body of research supports the link between quality child care and ECE and positive future outcomes for those children served including future educational attainment at the high school level and beyond. A recent meta-analysis of 22 research studies published between 1960 and 2016 found that children who attend high quality ECE programs are less likely to be placed in special education or retained in a grade and are more likely to graduate from high school compared with their peers who did not attend similar ECE programs<sup>6</sup>. Research supports the benefits of ECE even beyond high school. A 2018 study conducted by Reynolds, Ou, and Temple found that participation in ECE programs, particularly Child-Parent Centers (CPC), is associated with higher midlife postsecondary educational attainment<sup>7</sup>. Through following a sample of 1,500 students, the researchers found a 40-50% increase in college graduation rates (associate, bachelor's, and advanced degree attainment). The results of these studies show strong support for the long-lasting benefits of early childhood education. Increased educational attainment is strongly linked to an individual's employment opportunities and lifetime earning potential.



The developmental years of a child are some of the most critical years in a child's life. The evolving brain takes in information and is affected by the surrounding environment and experiences. This evolution of basic skills leads to efficient and easier learning at later ages. The highest rates of return on investments in human capital are from early preschool programs<sup>1</sup>. At the age of 40, those who had the opportunity to receive early education as a child have higher high school graduation rates, job salaries, home ownership, and fewer arrests<sup>8</sup>. The annual rate of return on quality early education has been

estimated between 7% and 10% when looking at a variety of future economic benefits and cost savings. Early investment in children during their developmental years will only generate positive future outcomes.

The disparity in school readiness between students that received early childhood education compared to those who did not is substantial. A higher

"Being a new mom is hard! And being a new working mom can be even harder due to the added layer of stress and guilt... When the time came for [my daughter] to start half day pre-school at Chapel District Elementary, a new level of stress crept up because I had no idea how my husband and I could manage getting her to school around noon and then picking her up in the afternoon. CACC came to my rescue!"

<sup>6</sup> McCoy, D. C., Yoshikawa, H., Ziol-Guest, K. M., Duncan, G. J., Schindler, H. S., Magnuson, K., ... Shonkoff, J. P. (2017). Impacts of Early Childhood Education on Medium- and Long-Term Educational Outcomes. *Educational Researcher*, 46(8), 474–487. doi: 10.3102/0013189x17737739

<sup>7</sup> Reynolds, A. J., Ou, S.-R., & Temple, J. A. (2018). A Multicomponent, Preschool to Third Grade Preventive Intervention and Educational Attainment at 35 Years of Age. *JAMA Pediatrics*, 172(3), 247–256. doi: 10.1001/jamapediatrics.2017.4673

<sup>8</sup> Heckman, J. J., Masterov, & V, D. (2007, April 2). The Productivity Argument for Investing in Young Children. Retrieved from <http://www.nber.org/papers/w13016>

percentage of children at CACC demonstrated kindergarten readiness (59%) in 2018 compared to the general population of Talbot County kindergarteners (42%) and the state average (47%) (see Table 4 and Figure 1). Children at CACC fall above the state average in almost all domains of KRA scores. Typically, this gap only continues to widen with age<sup>5</sup>. The education CACC provides to these children will place them at an advantage in the next step of their education compared to those children that did not receive similar quality early childhood education.



Preschool programs are imperative to the later success of children as they enter into the workforce. The educational environment provided by CACC provides a solid foundation from which its students can continue to grow and succeed. Children’s success at CACC creates a domino effect as they continue their education later in life. Now equipped with the skills and tools required for higher achievements, higher levels of educational programming will be more effective for these students. Down the line, organizations will have better, more well-rounded workers to employ resulting in higher profits for the business<sup>2</sup>. The enhanced education received by these young children provide for future employment opportunities and can impact the lifetime earning potential of the students at CACC. See Table 3 for earning levels for different levels of educational attainment in Talbot County. Higher lifetime earning potential leads to more economic activity in the local community through higher levels of spending on goods and services.

The impact of quality early education may be most pronounced for students of families in lower socio-economic strata. Economic and social disparities exist between high and low wage workers and families. With the different opportunities and advanced learning early childhood education programs provide, workers have a wider skillset and higher educational achievements resulting in increased wages. The gap between high and low wage workers and families can begin to decrease as workers are paid more resulting in lower economic and social disparities<sup>9</sup>. For children of families in poverty, quality early childhood education may be the key to breaking the cycle of poverty.

### **Avoiding Summer Slide**

Maintaining the educational gains of the school year require that children stay engaged and stimulated throughout the summer months. Thus, an important component of overall student success includes preventing what is termed the “summer slide,” a loss of academic knowledge over the course of the summer, particularly in reading and math. A 2015 study by Thum & Hauser<sup>10</sup>, found that children in 3<sup>rd</sup> to 5<sup>th</sup> grade lost, on average, about 20% of their school year gains in reading and 27% in math during the summer break. The knowledge loss snowballs as kids experience subsequent skill loss each year. Those prone to the most learning loss are younger children who are at a crucial stage in their educational development. Summer slide disproportionately impacts children from low-income families. Research

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<sup>9</sup> The economics of early childhood interventions

<sup>10</sup> Thum Y. M., & Hauser, C. H. (2015). NWEA 2015 MAP Norms for Student and School Achievement Status and Growth. NWEA Research Report. Portland, OR: NWEA



conducted by Kim & White (2011) found that more than half of the gap in reading scores between low-income and middle-income 9<sup>th</sup> graders could be attributed to the accumulation of summer learning differences between 1<sup>st</sup> and 5<sup>th</sup> grade<sup>11</sup>. While reading throughout the summer is an important component of combatting the summer slide, providing books is simply not enough. Kim and White’s research suggest that reading material that is matched to student interest along with teacher and parent support that encourages comprehension and fluency practices and provides adult/child interaction are key components of maintaining reading skill acquisition throughout the summer break. Other ways to combat summer slide include making time for smart play (such as games and puzzles), getting out of the house and into other stimulating environments, and encouraging kids to use their imagination<sup>12</sup>.



Over the course of the past four years, CACC has served an average of 269 students annually throughout the summer months. The summer camp programs serve kids aged 2 through 12 and provide flexible hours to help support the working families of their students. The educational programming of the summer camps is led by a team of MSDE accredited teachers. The stimulating, educational summer programs offered by CACC serve to eliminate the summer slide and ensure the students maintain their academic year knowledge gains so that they are ready to continue their educational journey at the beginning of the next school year.

<b>Table 3. Talbot County Earnings in the Past 12 Months<sup>13</sup></b>	<b>2017</b>
Less than high school graduate	\$28,875
High school graduate (includes equivalency)	\$28,960
Some college or associate's degree	\$37,115
Bachelor's degree	\$50,827
Graduate or professional degree	\$72,664

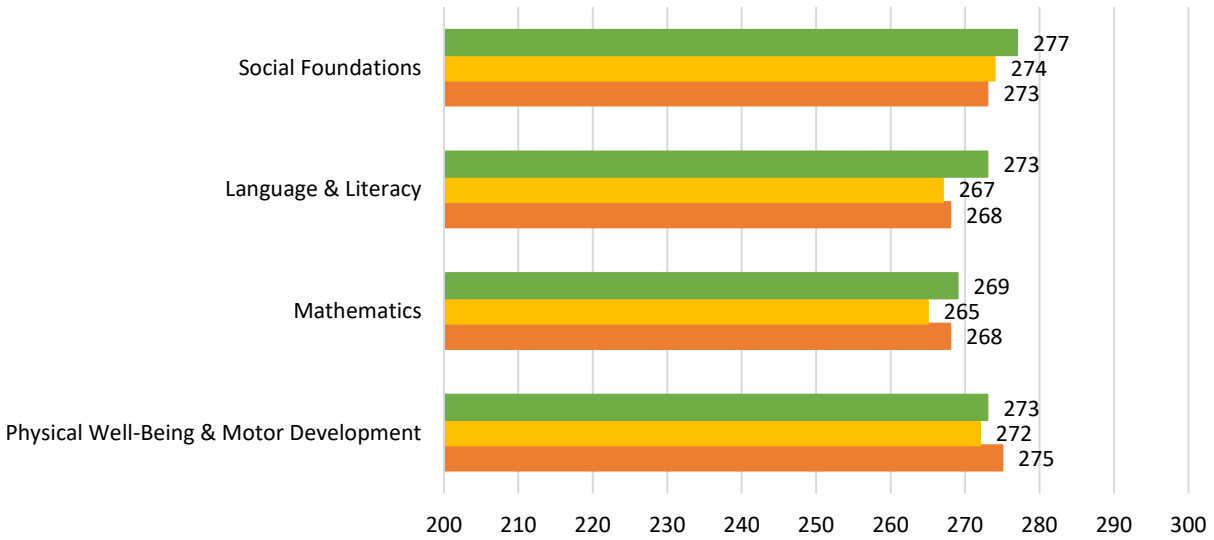
<b>Table 4. 2018 KRA Scores</b>			
	<b>CACC*</b>	<b>Talbot County</b>	<b>Maryland</b>
<b>Demonstrating</b>	59%	42%	47%
<b>Approaching</b>	36%	41%	33%
<b>Emerging</b>	5%	17%	20%

<sup>11</sup> Kim, J. S. & White, T. G. (2011). *Solving the Problem of Summer Reading Loss*. Kappan Magazine. 64-67

<sup>12</sup> Austrew, A. (2019). *How to Prevent Your Kids from Losing What They Learned in School During Summer Vacation*. Scholastic.com

<sup>13</sup> U.S. Census Bureau, American Community Survey 5-Year Estimates, Earnings in the Past 12 months (in 2017 Inflation-Adjusted Dollars)

Figure 1. KRA Domain: Average Scale Score



	Physical Well-Being & Motor Development	Mathematics	Language & Literacy	Social Foundations
■ CACC	273	269	273	277
■ Talbot County	272	265	267	274
■ Maryland	275	268	268	273

■ CACC ■ Talbot County ■ Maryland

### Children’s Health

CACC not only works to prepare their children for the next step in education, but the center also provides the basic necessities that foster active learning; one of which is nutrition. At all of its learning centers, CACC provides a nutritional breakfast and two snacks to every child each day (approved by the USDA Child and Adult Care Food Program).



Talbot County families span all socio-economic levels. Although the median family income is about 14% above the national average, about 10% of the total population in Talbot County lives in poverty. About 25% of the approximately 4,000 children under the age of 18 in Talbot County are impacted by poverty<sup>14</sup>. Poverty and food insecurity go hand-in-hand. The U.S. Department of Agriculture assists families with income below the poverty line through the Supplemental Nutrition Assistance Program

<sup>14</sup> U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2017

(SNAP). SNAP supplements food budgets for families in need to help provide adequate nutrition through the purchase of healthy foods.<sup>15</sup> About 1,802 families in Talbot County receive assistance from SNAP<sup>1</sup>. Although households are able to receive nutritional support from SNAP, a lack of adequate nutrition is still a threat to children and their overall development.

Elementary school children who suffer from food insecurity are 4x more likely to require mental counseling 7x more likely to be classified as clinically dysfunctional, 7x more likely to get into fights frequently<sup>13</sup>

Children that experience food insecurity especially through their early development are more likely to suffer from physiological stress and physical issues as they grow and mature. A lack of proper nutrition causes malnutrition to the body and can also put children at a greater risk for diseases as the immune system is weakened resulting in more frequent colds, headaches, and stomachaches. According to research conducted by Nyaradi, Li, Hickling, Foster, and Oddy, without sufficient important nutrients including iron, zinc, and vitamins, the brain is not fully able to develop in a child. Children overall do not have the same energy levels and motivation to explore the environment as those who do have food

security<sup>16</sup>. The fastest rate of brain development occurs in the first few years of a child's life. Receiving the proper nutrition as a child to support growth is imperative for their future health and success.

Not only can improper nutrition be detrimental to a child's health but also to their cognitive learning ability. Research suggests that a lack of nutritious foods in a child's diet can result in lower IQ and testing scores. Children with a diverse diet at three and a half were found to have higher IQ scores at the age of eight compared to children who did not receive proper nutrition early on<sup>2</sup>. Hungry children were also found to exhibit 7 to 12 times more behavioral problems and act-outs in the classroom compared to their well-fed peers<sup>17</sup>. Poor thinking skills, behavioral problems, lack of concentration, and increased stress levels are all results of hunger in children. It is critical children receive the right level of nutrition to ensure success in the classroom and in their futures.

Proper nutrition is an important factor in the learning success of children.

CACC has done its part to ensure children receive healthy meals and snacks that they otherwise might



<sup>15</sup> U.S. Department of Agriculture, USDA Food and Nutrition service, Supplemental Nutrition Assistance Program (SNAP).

<sup>16</sup> Nyaradi, A., Li, J., Hickling, S., Foster, J., & Oddy, W. H. (2013). The role of nutrition in children's neurocognitive development, from pregnancy through childhood. *Frontiers in Human Neuroscience*, 7(97). doi: 10.3389/fnhum.2013.00097

<sup>17</sup> Effects of Poverty, Hunger and Homelessness on Children and Youth. (n.d.). Retrieved from <https://www.apa.org/pi/families/povert>

<sup>18</sup> "Reading, Writing and Hungry: The consequences of food insecurity on children, and on our nation's economic success" November 2008, Issue Brief #8, Partnership for America's Economic Success

not receive. This nutrition helps to ensure each child has the tools they need every day to be engaged and ready to learn and to have a healthier start in life.

### Reducing Public Sector Costs

Affordable, high quality child care has clear and immediate impacts on the economy as seen in the impacts on the current workforce. The often less obvious, long-term impacts of early childhood educational programs include future public sector cost savings. Through enhancing children's school readiness and opportunities for long-term success, quality early childhood educational programs reduce the need for future costly educational interventions as well as the incidence of behaviors that impose high costs on the public sector such as dropping out of school, substance abuse, juvenile crime, and reliance on public support programs such as public healthcare, welfare, and unemployment programs.

Educational attainment has a significant impact on various public costs within the economy such that those with higher levels of educational attainment are less likely to use and rely on public programs<sup>19</sup>. The basis for future educational attainment is a strong foundation for learning that is developed during early childhood. The educational foundation that CACC builds for its students will pay dividends to the local economy in the future and has significant implications for future public cost savings.

### Public Healthcare Cost Savings

There has been extensive research suggesting that the health status of an individual is greater for those who have completed high school versus those who have not. A study conducted by the Agency for Healthcare Research and Quality (2015)<sup>20</sup> found that individuals with a high school degree have enhanced non-cognitive and cognitive skills as well as access to more economic resources. These skills and resources affect the community health behaviors and increase the overall health status of individuals in the area. Additionally, individuals with a higher level of educational attainment tend to have higher quality jobs that provide

**\$50K**  
In public healthcare-related cost savings per high school graduate



access to private health insurance. Access to health insurance through an employer decreases reliance on publicly funded healthcare. Based on their extensive research into health outcomes, Medicaid and Medicare enrollment, graduation rates, and present value calculations of per capita healthcare costs across different levels of educational attainment, Levin et al. estimate the lifetime health benefits savings from graduation to equal approximately \$49,967 per student in 2019 dollars.

<sup>14</sup> Levin, H., Belfield, C., Muennig, P., & Rouse, C. (2007). *The Costs and Benefits of an Excellent Education for All America's Children*. Columbia University.

<sup>20</sup> Zimmerman, E., Woolf, S., Haley, A. (2015). *Understanding the Relationship Between Education and Health: A Review of the Evidence and an Examination of Community Perspectives*. Agency for Healthcare Research and Quality.



### Crime Costs Savings

Educational attainment is directly related to crime reduction. According to Gentry, Mokkaapati, and Rampersad (2016)<sup>21</sup>, an increase in the percent of individuals educated at the high school level leads to a decrease in crime. Crime rates can also decrease with higher levels of educational attainment due to the additional time spent in the classroom in an academic setting. Delaying potential entrance into a criminal lifestyle until the age of eighteen will restrict development into that lifestyle. Levin et al. (2007) state that the four main public costs associated with crime are criminal justice costs for policing and trials, incarceration costs including parole and probation, state-funded victim costs such as medical and lost tax revenue, and governmental crime prevention agencies. An analysis of types of crime committed by high school dropouts along with the cost per crime compared to the decreased rate of crimes by a high school graduate, identifies that the average lifetime savings due to crime reduction through educational attainment is about \$32,818 per graduate in 2019 dollars.

**\$33K**  
In crime-related cost savings per high school graduate

### Welfare Cost Savings

**\$3.7K**  
In welfare-related cost savings per high school graduate

Graduating from high school increases the likelihood of finding a job or pursuing higher education, which would decrease the likelihood of relying on public welfare programs. According to Levin et al., an average of \$3,701 in welfare expenditures can be saved per high school graduate in 2019 dollars. Welfare costs include costs included in their study are Temporary Assistance for Needy Families, food stamps, and housing assistance (federal programs were not included).

### Unemployment Benefits Cost Savings

The likelihood of unemployment varies by educational attainment. Unemployment benefit cost savings can be realized if students graduate from high school. A quality education system that allows and encourages completion will give the public the opportunity to save on annual unemployment spending. Unemployed persons have the opportunity to file for and receive unemployment insurance benefits from the state, as long as they meet certain requirements. Even though these expenses are paid by the state, each county's tax fund contributes to this amount. In Talbot County, on average over the past 9 years, the unemployment rate for those with less than a high school diploma has been 1.5 percentage points higher than that of those with a high school diploma or equivalent<sup>22</sup>.



<sup>21</sup> Gentry, B., Mokkaapati, R., Rampersad, K. (2016). *Impact of Educational Attainment on Crime in the United States: A Cross-Metropolitan Analysis*. Georgia Institute of Technology.

<sup>22</sup> U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2017

## Community Partnerships

40+

Community  
partners

CACC has strong ties throughout the community as can be seen in the diverse partnerships with over 40 different local organizations. The partnerships provide children, staff, parents, and other community members with excellent learning and developmental opportunities, field trips, and more. These partnerships not only provide for those in need, but support CACC through allowing them to provide an even greater educational experience for children.

The first group of organizations that should be highlighted are those who provide children with extracurricular activities and field trips. These partners offer students of CACC access to experiences and learning opportunity that they may otherwise not be exposed to. Some of these partnerships have created educational programs, while others offer a unique experience that provide students with a chance to simply enjoy themselves outside of the classroom. The Academy Art Museum, Talbot County Free Library, Police and Volunteer Fire departments, and more, provide children the opportunity to get off-site learning experiences. For example, Academy Art Museum leads children in art projects while teaching them a variety of artistic styles. In addition to this, they provide free busing services to transport students to see the different exhibits. Another organization that provides students with year-round activities is the Talbot County Free Library. At the library, children participate in free reading programs and other planned activities during the school year and in the summer. The Chesapeake Bay Maritime Museum provides transportation and programs about the Chesapeake Bay.



Having a diverse group of partners allows CACC to serve more than just the students who attend the centers. Many of the partners work to provide parents, teachers, and other members of the staff at CACC networking opportunities, developmental screenings, classroom resources, and more. Bay Hundred Youth Task Force sponsors a prayer breakfast each fall. This event allows child-centered organizations an opportunity to network with community partners. The Talbot County Judy Center Early Learning Hub partnership focuses on assuring that all children enter school with the readiness skills they need to succeed. The Judy Center provides CACC staff and parents with training, family activities, developmental screenings, playgroups, summer school programs, and more. In addition to these activities, the Judy Center provides funds for emergency visits for families in need.

CACC partners with many organizations that offer health and developmental services, food, learning supplies, and more. One of CACC's priorities is to provide high quality child care for the residents of the surrounding areas. That being said, children and families do not only face the challenge of finding care, but finding and utilizing developmental services, food, and ensuring that their child/children are healthy.

Eastern Shore Speech Therapy and the Lion’s Club provide speech therapy and free vision tests for preschool children. In addition to these services, students who attend CACC can use services such as speech/language therapy, physical and occupational therapy, cognitive services and more, at Talbot County Infants and Toddlers. St. Vincent de Paul is another partner that CACC greatly cherishes, as they donate food, books, and other supply’s items to needy families at little to no cost. These services help to ensure that the children served by CACC are able to come to the program ready to learn and thrive.

Over 40 different organizations are committed to providing their services to the youth and families of CACC. These partners provide invaluable services to the children and families of CACC and help to ensure that CACC can provide the high-quality level of care and educational experience to those that they serve. CACC has been building brighter futures since 1970 and with the continued dedication from the community, more and more children and families will be served.





## Community Partners

- Academy Art Museum
- Bay Hundred Youth Task Force
- Boy Scouts of America
- CarePacks of Talbot County
- Chesapeake Bay Environmental Center
- Chesapeake Bay Maritime Museum
- Chesapeake Child Care Resource Center
- Child Find
- Eastern Shore Speech Therapy
- Easton/ St. Michaels Volunteer Fire Departments
- Empower Me
- Environmental Concern
- Family Affair Farm
- Girl Scouts of America
- Imagination Library of Talbot County
- Kynder and Jentler
- Lion's Club
- M & T Bank
- Musician
- Office of Oral Health, Maryland Department of Health
- Pickering Creek Audubon Center
- Phillips Wharf Environmental Center
- PNC
- Police Departments
- Raising a Reader (RAR)
- S.O.S. Sink or Swim
- St. Michaels Community Center
- SHORE UP! HEAD START - St. Michael's Site
- St. Vincent de Paul
- Talbot County Free Libraries
- Talbot County Health Department
- Talbot County Infants and Toddlers
- Talbot County Judy Center Partnership – Early Learning Hub
- Talbot County Public Schools (TCPS)
- Talbot County Child Care Association
- Talbot County Family Network
- Talbot Parks and Recreation
- Trident Aircraft
- University of Maryland Extension
- U.S. Air Force
- U.S. Army
- U.S. Navy
- YMCA of the Chesapeake
- 4-H