



EARLY CHILDHOOD EDUCATION ANALYSIS

Compiled by Early
Childhood Education
Task Force.

September 30, 2022

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EARLY CHILDHOOD EDUCATION STUDY

**Submitted to Principal Chief Chuck Hoskin, Jr.
in partial requirement of the
Verna Thompson Early Childcare Education Act**

by

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Early Childhood Education Report

September 2022

Introduction

This Early Childhood Education report was created at the direction of Principal Chief Chuck Hoskin, Jr. in regards to implementing the Verna D. Thompson Early Childhood Education Act. The report exams the availability of Early Childhood Education (hereafter referred to as ECE) services across the northeast Oklahoma to inform the Council and Administration's efforts to expand such services. Specifically, the study provides information on the following:

- Estimated number of Cherokee citizens eligible for ECE services and the number receiving such education and the sources of said education;
- Statistics regarding ECE staffing, including but not limited to Cherokee Nation's Head Start and Child Development Centers;
- Major ECE facility infrastructure, particularly Cherokee Nation Head Start and Child Development Centers, including progress on repair/replacement;
- Recommendations on the expansion and support to ECE programs for Cherokee citizens to increase widespread availability across the Reservation;
- Specific recommendations for the provision or support of ECE for Cherokee Nation, and entities, workforce;
- Determinations, if any, as to any executive branch reorganizations necessary to meet the purposes and policies of the Act.

An early childhood education task force was formed to create this initial ECE availability study, which consisted of Bridget Tobey, Child Care and Development Subsidy Manager; Tina Smith, Child Care and Development Resource Referral Manager; Aaron Emberton Education Services Acting Deputy Executive Director; Taralee Montgomery, Senior Advisor Public Policy; Taryn Taylor, Career Services Projects Coordinator; Camerin Fite-James, Executive Administration Special Projects Officer; and Anna Knight, Commerce Services Executive Director. A special thank you for assistance goes to Samantha Hendricks, Human Resources Executive Director; Charlotte Wood, Human Resource Data Analyst II; Jon Asbill, Senior Administrator Construction Projects; Derrick Vann, Tribal Registrar; and Gabrielle Jacobi, Child Well-Being Policy Analyst/Kids Count Data Coordinator at Oklahoma Policy Institute.

Importance of Early Childhood Education

Early childhood, particularly the first three years when the brain grows faster than at any other point in a child's life, lays the foundation for future learning, health, and success. Positive and negative experiences during this time have lifelong effects on one's overall development. Early childhood education programs, defined for this analysis as child care facilities, Head Start centers, and after school/summer care programs, promote the development of children and can have long-lasting impact on future education and schooling.

Access to ECE programming is particularly critical for Native American children as they often face socio-economic barriers and because nearly one in four Native American children live in households below the federal poverty line. These Native children are also more likely to experience trauma, with 35 percent having two or more Adverse Childhood Experiences. Adverse Childhood Experiences are potentially traumatic events that occur in childhood and can include violence, abuse, and growing up in a family with mental health or substance use problems. The poverty and chronic stress caused by childhood trauma not only impacts academic development and school readiness, but also adversely impacts lifelong health. ECE can help narrow gaps and inequities caused by poverty, with more than 40 years of research linking ECE programs to improved school performance, educational attainment, parent/guardian (hereafter referred to as caregivers) employment, future earnings, and reduced justice involvement. Additionally, research has found that 75 percent of Native households with one unemployed adult state that the reason for unemployment is directly related to inaccessible ECE. The following sections will examine ECE availability and accessibility within the Reservation and its contiguous counties.

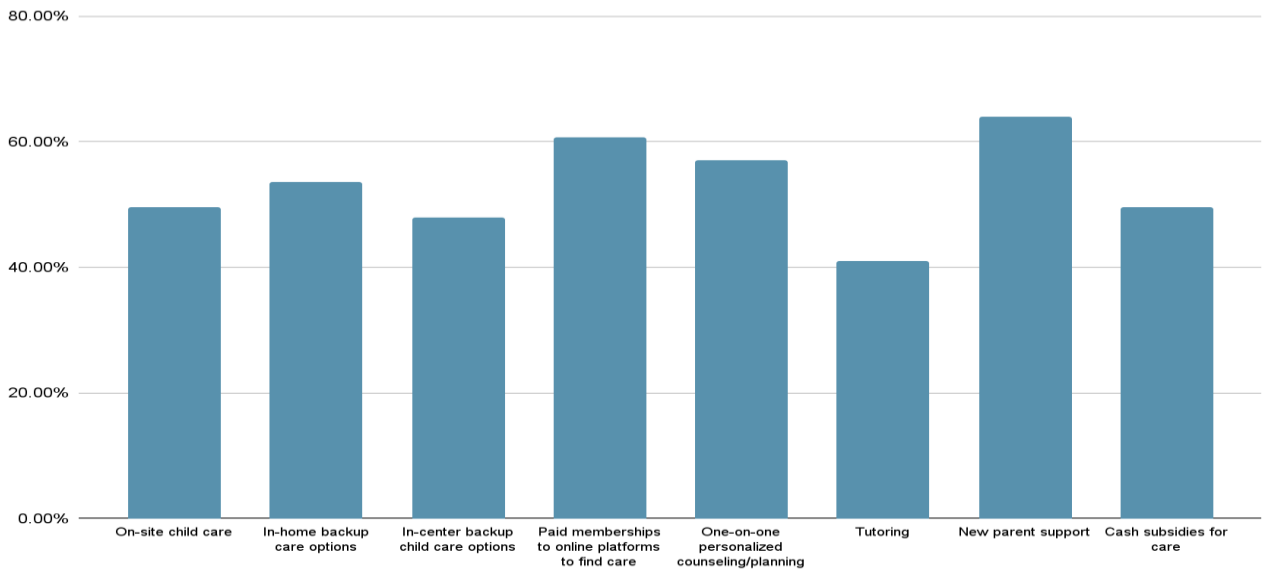
Over the last several decades, family needs have changed and ECE has struggled to keep up with the expanded and diversified needs. This has left families with few options for quality ECE, which has been the subject of much research and analysis. Borrowing from the United State of Agriculture's declaration of Food Deserts, ChildCare Aware of America and the Center for American Progress have coined the term "Child Care Deserts. Child care deserts are described as either no ECE providers within their zip code or too few available slots. A majority of Oklahoma is considered a child care deserts with 68 percent of all rural residents and 55 percent of all residents living in a child care desert. Child care desert designation is important as governments and businesses struggle to recruit and maintain workforces in today's time.

Early Childhood Education’s Impact on Workforce

Oklahoma GDP and total employment have recovered remarkably well from the pandemic, however the economic recovery hasn’t been equitable. National unemployment remains comparatively high for Native Americans, at 28 percent versus 18 percent overall. Additionally, women’s participation in the workforce has always lagged, and the COVID-19 pandemic worsened this situation as more than 2.3 million women have left the workforce. The result is the lowest women’s workforce participation rate since 1988. If men’s and women’s workforce participation were equal in Oklahoma, an additional 99,000 individuals would enter the workforce resulting in \$3.7 billion statewide wage increase. The workforce participation rate has impacted area employers plagued with pandemic-related disruptions, including difficulty maintaining staffing due to inaccessible ECE. This crisis has escalated leading to national recognition that ECE encourages caregivers employment opportunities and that ECE is critical workforce infrastructure.

The workforce also benefit greatly from family-friendly policies, which make it possible for employees to fulfill both family and work obligations, thereby increasing work-life balance and reducing lost wages and workplace absenteeism. The chart below illustrates family-friendly policies regarding ECE, which are intended to improve employee absentee and retention rates.

Types of Employer Provided Child Care Benefits

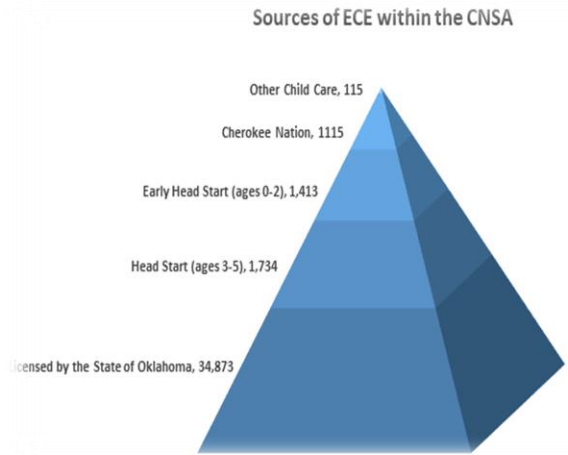


Improved work-life balance reduces stress and improves employee health, as well as dependent health. Studies show that employees with high stress and little control in their jobs are

most at-risk for stress-related illnesses and employee turnover. Additionally, caregiver stress is a leading cause of child maltreatment.

Early Childhood Education Availability on the Cherokee Nation Reservation

One in five Native caregivers stated the ECE center used before the pandemic has since closed, and over half said their provider experience staffing shortages. The Cherokee Nation Child Care Service Area, hereafter referred to as the CNSA, includes the entirety of the fourteen counties comprising the Cherokee Nation Reservation. The diagram to the right illustrates the distribution of ECE slots in the CNSA.



Changes in ECE Slots in CNSA 2016-2021

County	Child Care Centers			Child Care Slots		
	2016	2021	% Change	2016	2021	% Change
Adair	12	9	-25%	277	260	-6%
Cherokee	40	41	+2%	1,282	1,393	+8%
Craig	17	12	-29%	393	248	-37%
Delaware	28	28	0%	781	903	+16%
Mayes	28	18	-36%	876	627	-28%
McIntosh	15	12	-20%	319	306	-4%
Muskogee	64	53	-17%	1902	1813	-5%
Nowata	10	5	-50%	197	167	-15%
Ottawa	23	19	-17%	751	739	-1%
Rogers	42	36	-14%	1940	1967	+1%
Sequoyah	22	24	+17%	824	997	+21%
Tulsa	569	471	-17%	26,547	23,175	-12%
Wagoner	51	41	-20%	1,130	1,401	+24%
Washington	48	37	-23%	2,137	1,538	-28%

According to an analysis of data from the Oklahoma Child Care Resource and Referral Agency, the number of ECE providers within the CNSA decreased by 17 percent from 2016 to 2021. The number of ECE slots within this same area and timeframe also decreased by 10 percent. The table to the left illustrates the breakdown by county. ECE centers have decreased in every CN county except Cherokee, Delaware, and Sequoyah Counties, and the number of ECE slots have increased slightly in Cherokee, Delaware, Rogers, and Sequoyah

Counties.

The chart to the right, however, illustrates the extreme shortage in ECE slots by county. The ECE ratio represents the number of children, under age five, in each county for every one ECE slot available.

A wide range of children/slot ratios exist throughout counties in the CNSA. The numbers cited reflect county wide numbers, yet it is important to note the unincorporated areas in each county are void of any meaningful ECE slots, leading these areas to be classified as child care deserts.

Northeast Oklahoma Child Care Deserts

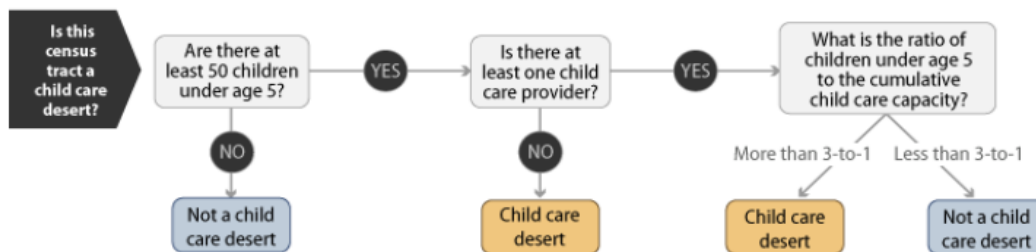
The Center for American Progress defines a child care desert as an area with at least thirty children under the age of five and either no ECE slots or too few ECE slots. Using this definition, every CNSA county contains numerous child care deserts, while Adair, Mayes, McIntosh, Nowata, Sequoyah, and Wagoner are considered county-wide child care deserts. This designation is important as we address accessible ECE as an essential component to workforce infrastructure.

Number of children per ECE slot within the CNCCDSA

County	ECE Ratio
Adair	6:1
Cherokee	3:1
Craig	3:1
Delaware	2:1
Mayes	5:1
McIntosh	3:1
Muskogee	3:1
Nowata	12:1
Ottawa	2:1
Rogers	3:1
Sequoyah	3:1
Tulsa	2:1
Wagoner	4:1
Washington	2:1

FIGURE 1

A working definition for child care deserts



Note: Child Care Aware defines child care deserts as "areas or communities with limited or no access to quality child care."

Source: Dionne Dobbins and others, "Child Care Deserts: Developing Solutions to Child Care Supply and Demand" (Arlington, VA: Child Care Aware of America, 2016), available at <http://usa.childcareaware.org/wp-content/uploads/2016/09/Child-Care-Deserts-report-FINAL2.pdf>.



A national report by ChildCare Aware of America on child care deserts indicates the majority of rural Americans experience ECE shortages and live in child care deserts:

- More than half of the population live in child care deserts, with 58 percent of rural tracts qualifying as child care deserts;
- More than 75 percent of the rural American Indians live in a child care desert;
- Child care deserts have maternal labor force participation rates 3 percent below adequately served communities.

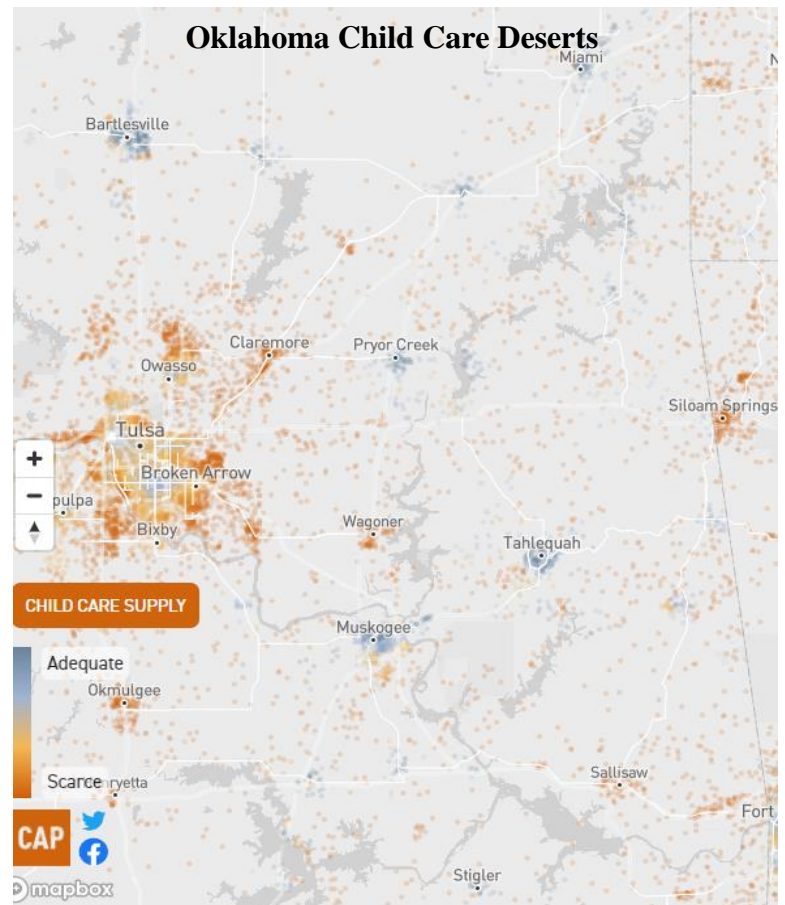
Working families deserve quality ECE choices; however, without marketplace options, they must compromise either their

ability to work or their child's ECE. The above map illustrates that northeast Oklahoma has child care deserts throughout the more rural areas, with areas of high employment indicating adequate ECE. The map is misleading as families typically prefer child care in close proximity to their employment and the analysis does not account inflow of commuters, which could affect determination of adequate ECE facilities. While the availability of ECE by location is an important factor in accessing ECE, several factors determine families' ability to access ECE.

Early Childhood Education Accessibility on the Cherokee Nation Reservation

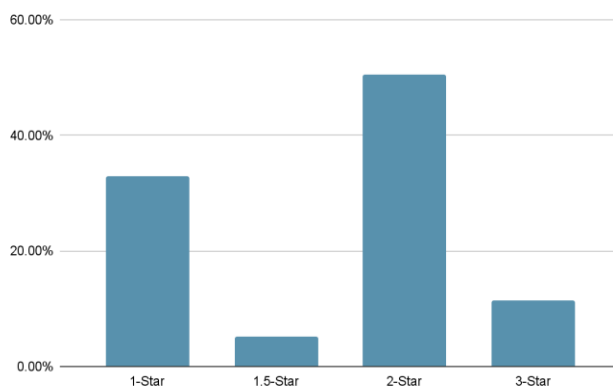
Choosing an ECE program is complex with factors such as cost, location, operating schedule, and personal preferences influencing choices. Research documents the high cost of ECE as a barrier, but supply issues are not as well-understood. Previous research does suggests location is especially salient for low-income parents. Understanding proximity to licensed ECE is important to ECE accessibility.

ECE Quality. The Oklahoma Quality Rating Improvement System (QRIS) assesses and communicates quality levels in ECE centers. One-star rating demonstrates meeting minimum licensing requirements for health and safety, and a three-star rating, currently the highest, meets



national standards (Oklahoma is redesigning its ECE rating system for 2023). ECE centers can increase their star rating through enhanced staff education and training, enriched curriculum, lesson plans that promote basic skills and high-level learning, and daily safety checks. The majority of ECE centers in the CNSA have a two or a one star rating, with 395 centers earning a 2 star rating and 297 centers earning a 1 or 1+ star rating.

Oklahoma ECE Star Ratings in CNSA



ECE Costs. Oklahoma ECE subsidies vary based on the QRIS. Participation is required to receive subsidies and ECE centers participating in the QRIS are limited on allowable rates, based on its star rating. Centers not participating in the state’s QRIS ratings may charge fees based on the market rates, which reflect revenue needed by the owners to providing an adequate living. Varying rates based on star ratings create disparities intended to reflect “pay for quality” but the reduced payments associated with lower stars greatly impedes private centers from improving ratings. For instance, according to the 2022 QRIS a one star center can charge \$20 for a child under 24 months, while a three star center can charge \$44. Additionally, ECE costs reflect the ECE type: ECE centers, operated in commercial spaces; and home based ECE, operated in residential spaces. Early Head Start and Head Start programs are ECE centers, however, they receive federal funding and do not charge fees to the caregivers.

Oklahoma has determined the average infant affordability rate, based on the county’s median household income and ECE rates, at 11.7% for center based care and 9.3% for home-based care. The US Department of Health and Human Services, however, defines affordability at 7%. Based on the State’s affordability Adair, Cherokee, Delaware, and Mayes County rates exceed affordability. In fact Delaware, Adair, and Cherokee Counties are the three least affordable counties for infant ECE center costs, and Adair, Delaware, and Sequoyah Counties are least affordable for infant home-based care, ranked 2, 3, and 5, respectively. The charts below reflect the average costs, the percentage average costs to the median household income, and the difference between the State’s affordability rate and the average costs percentage. Table 1 reflects the cost of infant care, in both commercial centers and homes, and the affordability of those infant care rates. Table 2 reflects the cost of children 4 years and older.

County Level ECE Costs by Age and Type, INFANTS

County	Infant, Center			Infant, Family Care		
	Price	% of Median Income	Difference to State Average	Price	% of Median Income	Difference to State Average
	Statewide Center-Based Affordability: 11.7%			Statewide Center-Based Affordability: 8.9		
Adair	\$6,565	14.2%	2.5%	\$5,785	12.5%	3.6%
Cherokee	\$8,200	13.1%	1.4%	\$5,978	9.6%	0.7%
Craig	\$7,929	10.1%	-1.6%	\$5,027	9.5%	0.6%
Delaware	\$7,267	14.9%	3.2%	\$5,897	12.1%	3.2%
Mayes	\$7,638	12.2%	0.5%	\$5,428	8.7%	-0.2%
McIntosh	\$6,188	11.1%	-0.6%	\$4,810	8.6%	-0.3%
Muskogee	\$7,475	10.5%	-1.2%	\$6,264	8.8%	-0.1%
Nowata	\$6,231	9.8%	-1.9%	\$5,060	7.9%	-1.0%
Ottawa	\$5,575	9.3%	-2.4%	\$5,575	9.3%	0.4%
Rogers	\$5,913	7.0%	-4.8%	\$5,913	6.9%	-2.0%
Sequoyah	\$5,609	10.2%	-1.5%	\$5,609	10.2%	1.3%
Tulsa	\$7,294	8.6%	-3.1%	\$7,294	8.6%	-0.3%
Wagoner	\$6,309	7.9%	-3.8%	\$6,309	7.9%	1.0%
Washington	\$6,126	8.2%	-3.5%	\$6,126	8.2%	-0.7%

County Level ECE Costs by Age and Type, 4 YEAR OLD

County	4 Year Old, Center			4 Year Old, Family Care		
	Price	% of Median Income	Difference to State Average	Price	% of Median Income	Difference to State Average
	Statewide Center-Based Affordability: 9.3%			Statewide Center-Based Affordability: 8.2%		
Adair	\$4,914	10.6%	1.3%	\$4,758	10.3%	2.1%
Cherokee	\$5,948	9.5%	0.2%	\$5,892	9.4%	1.2%
Craig	\$5,944	11.2%	1.9%	\$5,800	10.9%	2.7%
Delaware	\$6,500	13.1%	3.4%	\$5,939	12.1%	3.9%
Mayes	\$5,676	9.1%	-0.2%	\$5,096	8.1%	-0.1%
McIntosh	\$5,509	9.9%	0.6%	\$5,379	9.7%	1.5%
Muskogee	\$5,769	8.1%	-1.2%	\$5,585	7.8%	-0.4%
Nowata	\$5,763	9.0%	-0.3%	\$5,005	7.9%	-0.3%
Ottawa	\$5,587	9.3%	0.0%	\$4,519	7.5%	-0.7%
Rogers	\$7,112	8.4%	-0.9%	\$6,413	7.5%	-0.7%
Sequoyah	\$5,342	9.7%	0.4%	\$5,356	9.7%	1.5%
Tulsa	\$7,385	8.7%	-0.6%	\$6,347	7.5%	-0.7%
Wagoner	\$7,348	9.2%	-0.1%	\$6,407	8.0%	-0.2%
Washington	\$6,411	8.6%	-0.7%	\$5,976	8.0%	-0.2%

ECE Subsidies. As demonstrated in the previous affordability tables, many families require subsidies to access ECE. Qualifying families may receive subsidies to offset rates from the State, the Cherokee Nation, or other Indian Nations. Federal regulations define income eligibility for subsidy as the state median household income (the CN uses the LIHEAP state income as it is slightly higher). Subsidy providers may, however, adjust gross household income through work deductions, which can allow for additional eligible households. Many of the other tribal governments serve higher income households by increasing work deductions.

Cherokee Nation also offers its citizens a third option through the Relative Provider program. This program allows qualifying families to pay a relative (great grandparent, grandparent, aunt, uncle, or sibling over age 18) to care for the child in the relative’s home. Relative providers, while not licensed, help fill an ECE gap and provide a link to Cherokee family values, which is important as research demonstrates programs incorporating a community’s culture, values, and language are more effective and yield additional benefits for the child and caregivers.

The CN Subsidy program recently increased the Subsidy Income Guidelines effective 10/01/2022 to expand services. The result is a family of four, not self-employed, can achieve eligibility at \$89k annually, with the allowed 35 percent work deduction. Subsidies are essential to working families and in FY2021 CN subsidized 2,609 children, in 1,635 families. The chart below describes CN’s subsidy numbers, including Relative Providers, which indicate most CN subsidy recipients are working families using ECE centers.

Cherokee Nation 2021 Child Care Subsidy

FY2021 Data	Count	% of Subsidized Children
Number of Children Served	2,609	
Number of Families Served	1,635	
Average Monthly Subsidy Paid Per Child**	\$758	
Number of Subsidized Children in Relative Care*	187	7%
Number of Subsidized Children in Family Child Care Homes	312	12%
Number of Subsidized Children in Child Care Centers	2,194	84%
Number of Subsidized Children in Child Care Due to Parents Working	2,505	96%
Number of Subsidized Children in Care Due to Parents in School or Training Program	104	4%

*Relative Care - relatives such as great grandparents, grandparents, aunts, uncles and siblings over 18
 **Average Monthly Subsidy Paid Per Child – FY2021 included COVID-19 Subsidy Policy Add-on payments

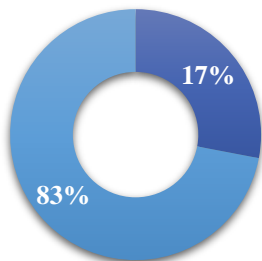
Cherokee Children Early Childhood Education Needs

The following table reflects Cherokee children in the CNSA up to age 14 potentially needing ECE. As illustrated in the table below, 5,824 Cherokee citizens aged 0-4 reside in the CNSA, while CN ECE slots in the same geography total 1,115. The result is CN provides approximately 19 percent of under 5 ECE slots needed by Cherokee children. These figures account for vacant slots due to staff shortages: 100 unfilled CN Head Start staff positions and 111 unfilled CN Child Development Center staff positions.

Cherokee Children by Age as Reported by Tribal Registration September 2022

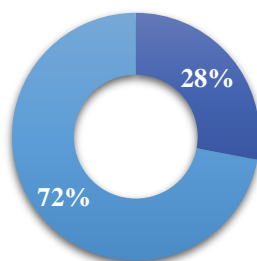
County	0-2 years	3-4 years	5-9 years	10-14 years	Total
Adair	232	276	1,015	1,136	2,107
Cherokee	485	575	1,711	1,986	4,757
Craig	81	81	300	381	843
Delaware	206	283	895	1090	2,474
Mayes	287	335	1,010	1,163	2,795
McIntosh	0	0	0	0	0
Muskogee	191	206	703	881	1,981
Nowata	38	61	198	230	527
Ottawa	29	28	141	147	345
Rogers	370	431	1,510	1,628	3,939
Sequoyah	329	414	1,126	1,312	3,181
Tulsa	261	319	1,084	1,160	2,824
Wagoner	11	18	52	46	127
Washington	126	151	540	576	1,393
Total	2,646	3,178	10,285	11,736	27,845

CHEROKEE CHILDREN VS POPULATION, UNDER 5



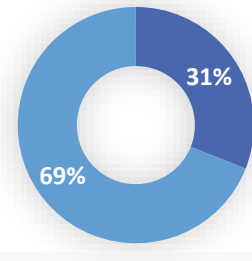
■ Cherokee Under 5 ■ Non-Cherokee Under 5

CHEROKEE CHILDREN VS POPULATION, 5-9



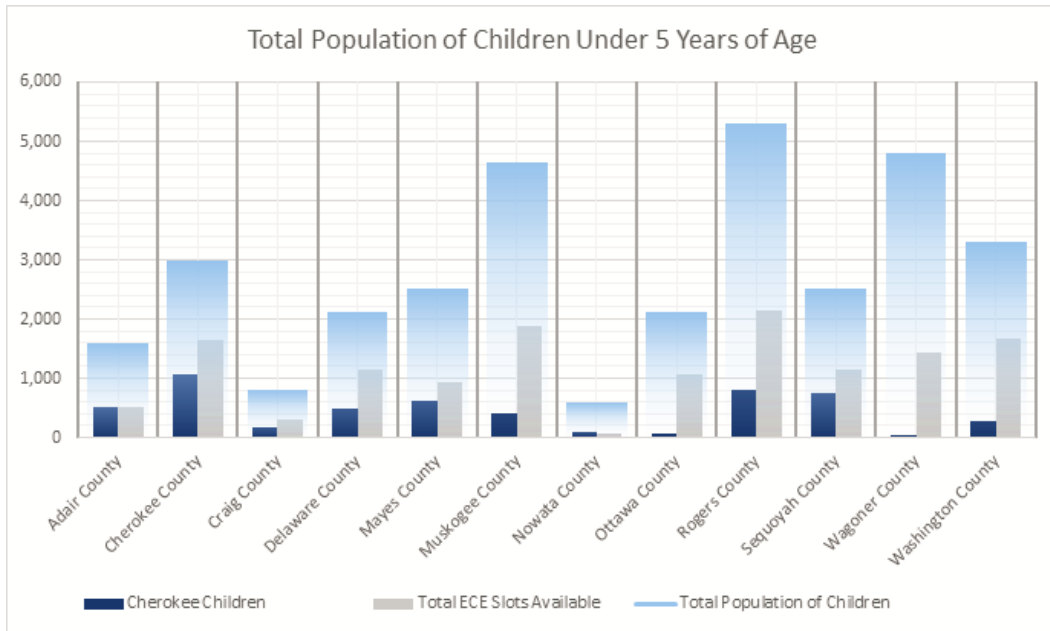
■ Cherokee 5-9 ■ Non-Cherokee 5-9

CHEROKEE CHILDREN VS POPULATION, 10-14

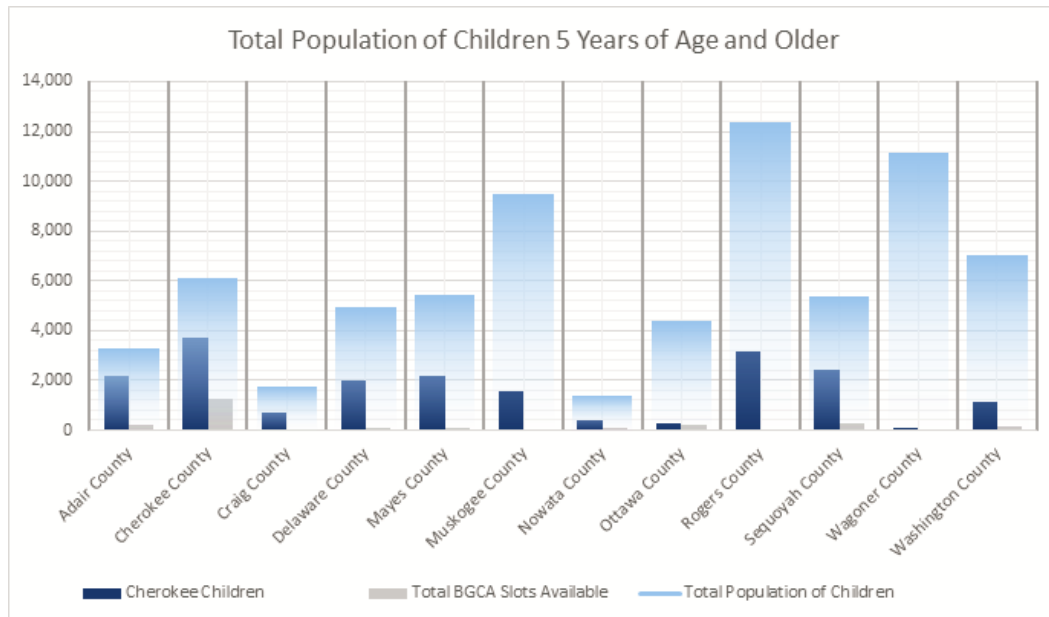


■ Cherokee 10-14 ■ Non-Cherokee 10-14

The chart below examines the availability of ECE slots, compared to the population of Cherokee children under 5 years and the total population of children under 5. No county in the



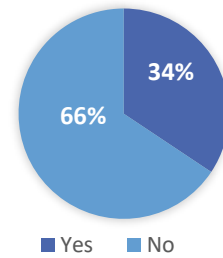
CNSA has adequate ECE slots, however, this chart reflects populations by age and ECE slots and does not take into account the number of families who do need ECE services. The chart below reflects the total child population over 5 years, the number of Cherokee children, and the average daily attendance at local Boys and Girls Clubs. It should be noted that these afterschool programs likely have more capacity than reflected by the average daily attendance.



Cherokee Nation Employee ECE Needs

In July 2022, CN employees, including CNB and HACN, were surveyed regarding ECE needs. Employee responses totaled 850 and 75 percent of respondents indicated a need for quality, affordable child care, while 66 percent indicated dissatisfaction with their current child care.

Employee ECE Satisfaction

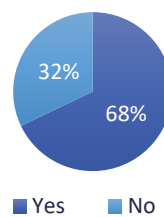


ECE Hours of Operation. Survey results indicate hours of ECE operation are a major concern for employees. Most ECE centers operate from 7:30 am to 5:30 pm. Cherokee Nation Early Head Start and Head Start operates from 7:30 am to 2:30 pm, with only 48 slots available in Tahlequah for a 5:20 pm pickup. The 5:20 pm pickup slots are consistently full. Additionally, CN Head Start closes during all school breaks, including summer, holidays, and virtual learning days. It is important to note 569 CN Head Start slots are in public school buildings and hours of operation may be limited at those facilities. The CN Child Development Center in Tahlequah operates from 7:30 am to 5:30 pm, while the Center in Stilwell operates 7:15 am to 5:15 pm. Employee survey results **do not** align with general operational hours at ECE centers, including Cherokee Nation ECE centers:

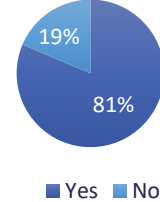
Hours of Operation Needed	Percentage Government Employees	Percentage of CNB Employees
6:00 am to 8:00 pm	90%	90%
After 6:00 pm	6%	35%
Weekend Care	0%	42%

Much of the ECE focus is children under 5, however children between the ages of 5 to 12 are also in need of ECE outside of school hours. Please note some information covers children up to the age 14 and some covers children up to age 12, it is how the data is broken down from different sources. Just over 50 percent of employees surveyed indicate ECE needs for children between the ages of 5 and 12 years of age. Additionally, almost 80 percent of the Cherokee children within the CNSA are between the ages of 5 and 14, which demonstrates parents are seeking after school and summer ECE centers.

Before or After School Care Needed



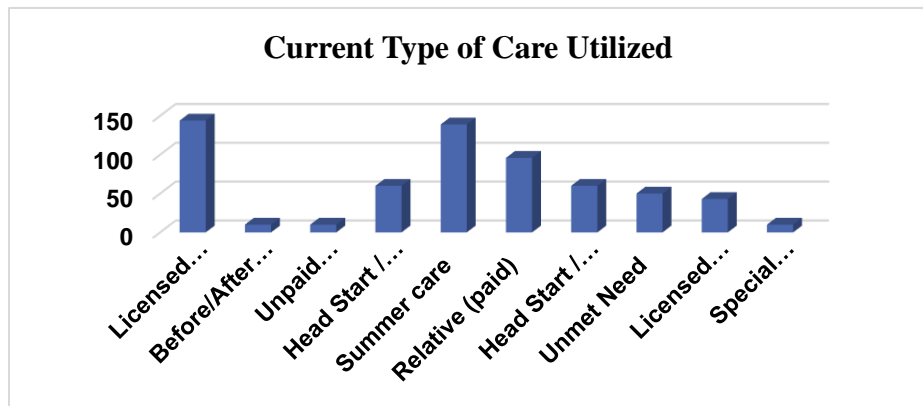
Summer/Holiday Care Needed



Post-pandemic, employees are growing more concerned regarding the implementation of virtual learning into the public school calendar year. Specific comments by employees indicate the desire to work remotely, if possible, when schools require virtual learning for children under 12. The majority of employees also indicate the need to miss work due to inconsistent child care availability and schools' virtual learning choices.

ECE Types.

Employees currently use a variety of ECE types, including paid and unpaid relative care. The table to the right also indicates employees mostly use

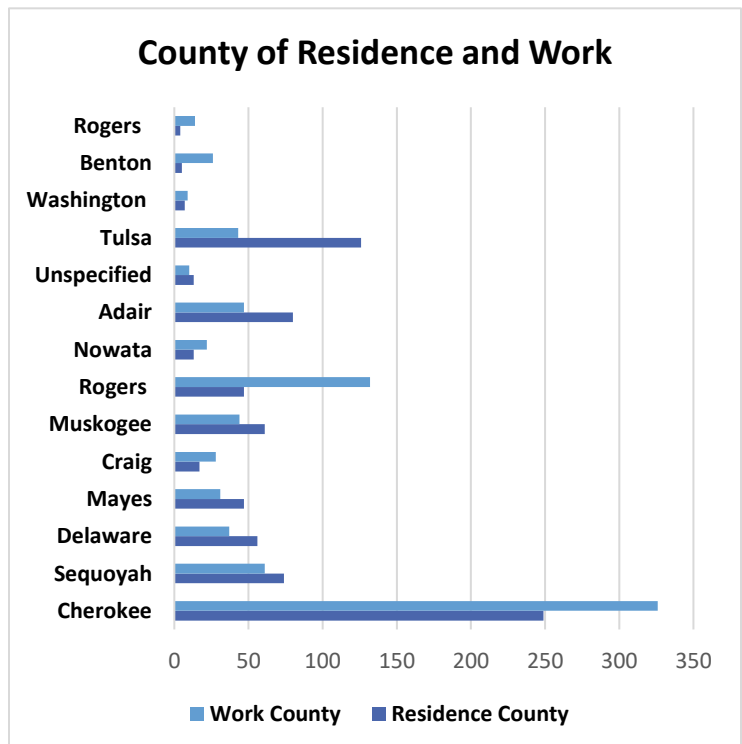


licensed ECE centers and summer care, followed by paid relative care and Head Start.

ECE Costs and Location. More than 55 percent of the aggregated survey respondents indicated gross annual income over \$75k, while 56 percent of CNB employees have gross annual income less than \$55,000 and 47 percent of government employees have gross annual income less than \$55,000. Interestingly,

almost 80 percent of government employees surveyed indicate they receive ECE financial assistance and only 7 percent of CNB employees indicated they receive ECE assistance. This suggests that CNB employees are not as familiar with subsidy programs, which shows a need to provide better information for CNB employees to assist with ECE needs.

Employees indicate the need for ECE close to their work, however 66 percent indicate they currently access ECE close to home due to availability and affordability, several commenting on the



increased cost of ECE in the Tulsa Metropolitan Area. Cherokee Nation employees primarily work in Cherokee and Rogers Counties.

Cherokee Nation ECE Infrastructure

Cherokee Nation is expanding the ECE slots in various communities through additional Child Development Centers. Additionally, Cherokee Nation is improving the ECE infrastructure by improving Head Start and Early Head Start Centers. Further research can be conducted regarding expanding Head Start slots, however, current staffing shortages must be resolved to determine viability of an expansion.

Location	Expected Completion	Construction Phase	Infrastructure Improvement	Impact on ECE Availability
Kenwood Head Start	Fall 2023	Under construction	Additional space and improved play areas	Quality Improvement
Salina Head Start	2025	Pending property procurement	Additional space and improved play areas	Quality Improvement
Nowata Head Start	TBD Kickoff follows Salina/Tahlequah Head Starts completion	Design phase	Additional space and improved outdoor play areas	Quality Improvement
Cherry Tree Head Start	TBD Kickoff follows Salina/Tahlequah Head Starts completion	Schematic design phase	Additional space and improved outdoor play areas	Quality Improvement
Jay Head Start	TBD Kickoff follows Salina/Tahlequah Head Starts completion	Site selection	Additional space and improved outdoor play areas	Quality Improvement
Tahlequah Head Start	2025	Construction document design	Replace existing facilities and added storm shelter	Quality Improvement
Tahlequah CDC	Summer 2023	Under construction	Safe rooms, new fencing, three new classrooms	ECE slots increase, pending licensing and age determination
Stilwell CDC	Summer 2023	Under construction	Safe rooms, new fencing, three new classrooms	ECE slots increase, pending licensing and age determination
Pryor CDC	TBD	Bidding phase	New facility	Increase slots by 150
Sallisaw CDC	TBD	Funding approval and construction documents	New facility	Increase slots by 175
Durbin Feeling Immersion Program	November 2022	To be completed 11/10/2022	New facility	ECE slots increase, pending licensing and age determination

Early Childhood Education Workforce

Young children benefit from stable attachment to consistent caregivers, and disruption in caregiver consistency negatively impacts language, literacy, and social-emotional development. A 2019 national study of Head Start participants found children who experienced higher teacher turnover had smaller vocabulary and literacy gains, as well as more behavioral problems than their counterparts who experienced lower turnover. The average turnover rate for the ECE profession is documented between 26 and 40 percent, and while the COVID-19 pandemic compounded this existing issue, no more recent studies on turnover have been completed. The CN’s CDC turnover rates are very low compared to industry standards while the Head Start programs are higher than the industry average, post pandemic. The table below illustrates the national ECE industry turnover rate and the CN ECE turnover rates. It is important to remember this figure is critical as there are insufficient ECE professionals to meet demand.

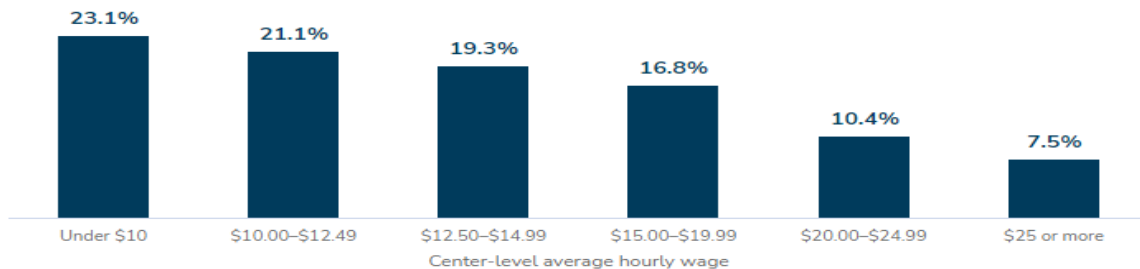
Program	Industry Turnover Rate	Cherokee Nation Turnover Rate*	
		April 2021	April 2022
Head Start	17.4%	17.93%	21.2%
Pre-K	17.4%	No Data	No Data
ECE Centers (CN CDC)	21.1%	5.56%	9.61%

*Cherokee Nation Human Resources Data

Several factors predict turnover rates, all of which likely tie low wages within the ECE industry. Those factors include wages, type of ECE programs, and ECE subsidy acceptance.

Average turnover decreases as wages increase

Center-level average annual turnover for staff working with children who are ages zero to five years and not yet in kindergarten, across all center types



Publically funded ECE programs, i.e. public pre-k and kindergarten, have lower turnover rates, likely due to better pay and benefits, than private child care centers and homes, which can explain lower turnover rates at CN CDC. This, however, does not explain higher than industry

CN Head Start turnover rates, which should be further examined through interaction with Head Start staff and exit interviews.

Lastly, ECE programs accepting subsidies have a larger turnover rate than those not accepting subsidies, 25.3 percent turnover rate and 15.8 percent turnover rate, respectively. This is likely driven by low subsidy reimbursement rates that force ECE providers to absorb additional operational costs. Oklahoma and CN ECE subsidy rates only reimburse 60.3 percent of true cost of care, forcing ECE providers to cover the remaining 39.7 percent cost of care. The result of the Oklahoma style subsidy structure results in less money for employee wages, benefits, professional development, program supplies and curriculum, and facility maintenance

Recruitment and Retention Best Practices

Recruiting and retaining ECE professionals is a long-standing challenge across the U.S. due to historically low compensation and fewer opportunities for career advancement. Specifically, the challenge relates to wages, benefits, coordination between ECE/public education systems, and professional development.

Inadequate Compensation and Benefits. Compensation is a complex issue because the consumers cannot afford higher ECE payments, but the current prices do not allow providers to offer livable wages, benefits, and support of professional development. Public funding for ECE uses per-child reimbursement rates that are far below the true cost of care. The average annual wage for an ECE professional in the state of Oklahoma is \$22,790, which is 176 percent of the Federal Poverty Level for a single adult. Additionally, half of all ECE professionals are enrolled in at least one public assistance program. Early childhood education also has the lowest earning potential of all college majors, which is especially problematic for students assuming debt to complete their degrees.

Low wages are not consistent with the type of work ECE professionals perform. ECE professionals perform critical work identifying potential developmental delays, working with challenging behaviors, practicing developmentally appropriate interactions, and laying the foundation for school readiness and future success. Poor compensation and benefits are detrimental to the providers but also to the children they care for, as poor pay and high levels of stress often result in a lower quality care. CN Human Resources recently conducted a market study for Head Start employees resulting in an increased starting wage of \$17 per hour. This is a significant increase in starting pay at almost \$4 per hour. The market study is currently being completed for CN CDC professionals.

ECE System is Under Resourced and Fragmented. Although pay is low across the industry, it varies greatly depending on the program and child’s age. For example, the average annual wage for an infant/toddler teacher is 26 percent less than that of a pre-k teacher (\$9.26/hour vs \$12.44/hour), but pre-k teachers are paid 48 percent lower than similarly qualified kindergarten teachers (\$12.44/hour vs \$23.88/hour). As a result, the poverty rate for ECE professionals is 8.9 times higher than that of K-8 teachers in Oklahoma, or 23.2 percent versus 2.6 percent respectively. This is partly due to public funding for schools. Child age also affects costs as infant/toddler care is notably higher than older children due to smaller child-teacher ratios and added regulations. Often, ECE professionals are incentivized by higher pay and better professional work environments to leave private ECE and Head Start programs for public schools. Additionally, public schools and Head Start centers receive enrollment based funding while other ECE centers are paid based on the child’s attendance. The chart below reflects Oklahoma ECE professionals’ wages and the percentage of change in those wages since 2017. Paying ECE professionals on par with kindergarten teachers would likely reduce turnover rates at ECE centers.

Position	Hourly Pay	Percent change since 2017
Child Care Worker	\$9.26	-3%
Pre-K Teacher	\$12.44	-14%
Child Care Center Director	\$18.14	-4%
Kindergarten Teacher	\$23.88	N/A
Elementary Teacher	\$24.33	N/A
All Oklahoma Workers	\$17.18	N/A
Livable wage for a single adult in OK with no children (MIT 2022)	\$15.75	N/A

Professional Development is Uncoordinated. Professional development is important to refine career skills and promote advancement, however, due to the fragmented nature of the ECE industry access to professional development opportunities varies greatly. Publicly funded programs like Head Start and public school pre-k have much larger budgets to provide training, as well as time during working hours. Additionally, increased ECE professional skills do not often lead to job advancement, which decreases the value of professional development.

Cherokee Nation has implemented an ECE certification training program for employees, through which tuition, books, and a small Economic Assistance Payments to attend class outside working hours. Program participants also receive payments based on training completion. The program is intended to enhance ECE quality and professional development. To date, 43 CN child care employees and 8 non-employees have accessed this program.

Conclusion

Early Childhood Education (ECE) programs provide critical services that enhance child development and allow caregivers to participate in the workforce. However, increased costs and high turnover rates have made access to child care increasingly difficult. ECE operating costs have increased by 30-35 percent since the start of the pandemic and 9 percent of ECE centers have closed. The number of ECE centers within the CNSA fell by 17 percent from 2016 to 2021. The majority of caregivers rely on ECE subsidy, however four counties within the CNSA indicate only 75 percent of ECE slots accept subsidy.

ECE centers provide important services every day by teaching and caring for children. Their work prepares early learners for the future and creates critical infrastructure for equitable workforce participation. Local and state economies are negatively impacted when caregivers cannot access ECE programs. Twenty-nine percent of Oklahoman residents stated in a recent survey, July 25, 2022 through August 8, 2022, that ECE arrangements continue to be disrupted due to the coronavirus pandemic.

Any approach to improving ECE accessibility challenges must incorporate the needs of both caregivers and ECE providers. The CN continued expansion of ECE investments would help caregivers enter the workforce and allow more children access to high-quality early learning opportunities, while also improving the job quality and lives of the ECE providers in communities throughout the CNSA.

The ECE infrastructure is an important investment as it is uncertain that the ECE industry can naturally and efficiently allocate quality ECE. Experts have shown in study after study that high-quality ECE produces external benefits that are abundant and long-lasting. Quality ECE may be costly, but many of its associated benefits spill over into society over time, reducing inequality in educational, health, and social outcomes. Yet while parents' private child care spending serves the public good, the government invests relatively little in subsidies to encourage such spending. By investing in child care infrastructure as much as it does in bridges and roads, the government can support economic growth and family economic security.

This report can be used to create a strategic plan for ECE within the CN Reservation. Incentivizing employment is often a goal for policymakers who seek to improve economic security for families. However, the lack of affordable and accessible ECE is too often a barrier for families. Only through comprehensive investments can key policy changes aimed at boosting supply, reducing costs for families, and creating a robust workforce become a reality.

Recommendations

An ideal ECE system is holistic, culturally competent, and inclusive of the whole family, seamlessly supporting children and caregivers, and fostering education, physical health, mental health, and social-emotional development using coordinated data collection, screening, referrals, and interventions. The ideal system would also be affordable while using best practices upholding high-quality early learning opportunities. The ideal system would support caregivers in their own work, education, public assistance, and job training. Development would require partnerships with caregivers, tribal leaders, and community stakeholders. A comprehensive strategy for improving ECE systems must include: 1) building ECE supply; 2) supporting the child care workforce; and 3) expanding affordability. The following recommendations could serve as the basis for a coordinated, comprehensive ECE strategy.

Building ECE Supply

Stabilizing and increasing the supply of ECE slots, both privately and publically operated, is essential to reduce child care deserts, and can be enacted through investments.

1. Build ECE Supply - Expand ECE Slots

Cherokee Nation provides only 19 percent of ECE slots needed by Cherokee children. Expanding slots in the following areas, prioritizing Cherokee citizens and employees, will allow more accessibility within the CNSA:

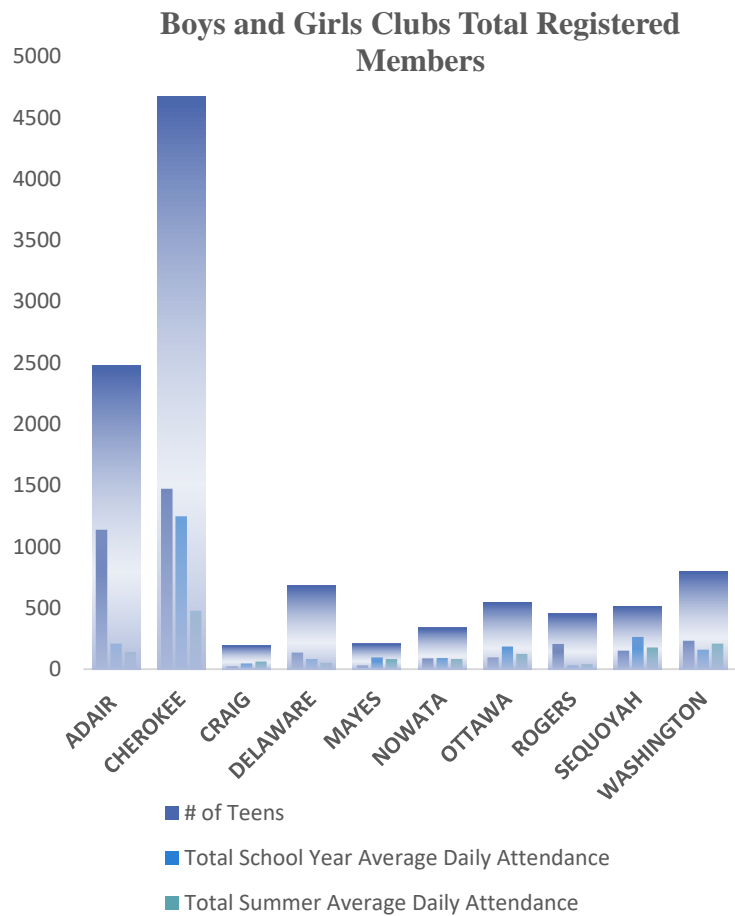
Recommendation. An ECE facility at the Hard Rock Casino location to support the ECE needs of employees and their families. The 24 hour facility, the special needs, and sheer volume of casino employees, CNB could build an ECE employee facility, which could be operated by the ECE professionals in the CN CDC. An ECE in this location should have the capacity needed for children less than 12 years old, in order to accommodate afterschool and summer care. This location would help the Hard Rock recruit and retain employees, as well as reduce absenteeism and tardiness. This is particularly critical for a 24 hour facility with shift workers.

Recommendation. Consider adding additional ECE slots in Cherokee, Delaware, Rogers, and Sequoyah Counties, either through additional slots at current CN sites or through incentives for private providers. These counties have the largest ECE slot deficits for both Cherokee children and the child population in general. The chart below indicates shortages in ECE slots for children under 5 years of age.

County	Shortage in ECE for Cherokee Children	Shortage in ECE for Total Child Population
Cherokee	560	1,505
Delaware	456	1,195
Rogers	741	3,360
Sequoyah	519	1,562

Recommendation. Pilot summer programs for CN Head Start participants and extend all Head Start slots to full day. According to CN Head Start, the cost of each classroom during the summer is approximately \$85k. Additional research would determine total costs based on each locations needs. Currently just over 50 percent of CN Head Start families meet low income requirements, however, by extending summer and holiday care, low income families may be more likely to enroll children in Head Start Programs.

Recommendation. Extend the hours of operation at the CN ECE sites in order to better accommodate working caregivers, including employees of Cherokee Nation and its entities. A cost analysis would need to be performed to ensure adequate funding to extend operational hours.



Recommendation. Enhance Boys and Girls Clubs partnerships to expand ECE for school aged children, which is the largest segment of Cherokee children in the CNSA. Boys and Girls Clubs in the CNSA currently accommodate 2,413 children each year. Adair, Cherokee, Delaware, Rogers, and Washington Counties appear unable to provide adequate after school slots. It also appears deficits occur in summer programs, although more research is necessary per site to determine the summer program structures. For example, in Tahlequah the Boys and Girls Club summer program runs concurrently with the public summer school and is limited to on those students selected.

Recommendation. Consider funding a Boys and Girls Club Summer Pilot Program. Enhanced summer programs could be offered in Cherokee, Mayes, Adair, and Nowata Counties. These pilot sites could provide needed information to determine the feasibility of permanent funding for summer care in the most underserved areas of the Reservation.

2. Build ECE Supply - Professional Development

Professional development improves program quality and effectiveness while improving ECE career pathways. Accessing training opportunities can be a challenge, however recently CN ECE programs began partnering with CN Career Services to enhance professional development, as previously mentioned. Regrettably, most private ECE centers do not have the resources to send their employees to this development opportunity.

Recommendation. Provide a “one stop” shop for ECE providers through the CN Child Care Resource and Referral Program. Online resources could list all ECE training opportunities, as well as job openings in the public and private market. Market services available through the CN Child Care Resource and Referral Program. Specifically, ECE owner/operator training through both the Child Care Resource and Referral Program and the CN Small Business Development Assistance Center.

Additionally, a feasibility analysis could examine professional development training on site at ECE centers to minimize resource costs to centers. The 2020 Administration for Children and Families Tribal Early Childhood Working Group determined that providers want a comprehensive, one-stop online resource for all available early childhood technical assistance resources.

3. Build ECE Supply - Capital Access

Oklahoma recently announced Child Care Desert Grants, using ARPA funding, to new or expanding licensed ECE centers in child care deserts. Easily accessible and affordable capital may be necessary to incentivize ECE center operations.

Recommendation. Improve access to capital through grants or low interest financing to ECE providers meeting specific criteria. This could include ECE centers in communities with fewer resources, those serving families with non-traditional hours of care, and/or those willing to work towards improving their rating within the Oklahoma Quality Rating Improvement System, which could help them charge increased rates.

4. Build ECE Supply - Increase Payments to Providers

ECE providers have limited revenue potential, particularly ECE centers accepting subsidies based on the state's quality rating system. This system limits provider revenue for two reasons: 1) the state will not allow ECE centers accepting subsidy to charge higher rates for families not receiving subsidy and 2) the state pays lower rates to ECE providers that have lower quality ratings, hampering their ability to improve ratings without substantial owner investment.

Recommendation. Consider tiered rates, differential rates, or add-on rates to increase provider payments in order to address targeted needs. For example, add-on rates above the typical daily rate for services to children with special needs, non-traditional hours, school age children, professional development, education milestones, location in child care deserts, and Cherokee language speakers.

Recommendation. Move from an attendance-based subsidy to enrollment-based subsidies, which support fixed costs of ECE centers by paying on the number of children enrolled, rather than the number who actually attend on a given day. An alternative could also be an increase in the number of absent days to receive full subsidy payments. Currently, the CN absenteeism policy mirrors the State's 15-day, or 75 percent, minimum attendance requirement for full payment. The CN expanded its absenteeism policy at the pandemic's onset, however that expansion expired on July 31, 2022, despite private providers continuing to experience issues.

This change would help offset fixed costs such as rent, utilities, wages, and benefits that continued to accumulate no matter attendance, allowing providers to improve financial stability while increasing the quality of care. Nationally, switching to an enrollment-based subsidy permanently would cost an estimated 4.2 percent more than the attendance-based subsidies and would affect 76 percent of licensed child care slots currently subsidized.

5. Build ECE Supply –Oklahoma 3 and 4 Year Old Programs

The state of Oklahoma states that 74 percent of eligible children are enrolled in a Head Start or pre-kindergarten program. Oklahoma ranks 2nd nationally in pre-kindergarten programs, yet only 16 percent of eligible 3 year olds are enrolled in 3 year old ECE programs.

Recommendation. Further research the capacity of State funded pre-kindergarten programs within the public school system and the 3 year old programs through Head Start centers. Current research illustrates an underuse of these State funded programs and accurate/updated information can be provided to CN citizens in order to improve enrollment in publically funded Head Start programs.

Supporting the Child Care Workforce

Recruitment and retention of ECE professionals can be addressed through compensation and career path development. Many ECE professionals move to public school systems, which pay higher rates than the ECE industry, or they move from the ECE industry completely in order to make a livable wage.

1. Supporting Workforce - Improve Compensation for ECE Professionals

Recommendation. High-quality ECE professionals must make a livable wage. This will reduce turnover and improve retention for those otherwise leaving the field to join the K-12 school system. While it is harder to address the compensation and benefits of privately employed child care professionals, increasing the per-child subsidy reimbursement rate will undoubtedly improve ECE provider take home pay.

Recommendation. Analyze the market rates for all ECE professionals within the CN employ and provide consistent, regular hiring and retention bonuses for all ECE professionals.

Recommendation. Develop career pathways with a clear roadmap. Many ECE career pathways are program-specific, which hinders the ability for professionals to see their opportunities across settings. Career pathways may address compensation standards for education and/or training, establish clear professional standards regarding knowledge, skills, and required education/credentials tied to job titles across various programs, and create consistent standards across the system. Establishing advancement and specialization opportunities by clearly defining the necessary skills or education levels required to be promoted or remain in a similar role but at a different program or age group.

2. Supporting Workforce - Encourage Degree and Certification

A comprehensive professional development system is a network of education, training, and technical assistance that is available to ECE professionals, and which would help potential ECE professionals understand advancement along their chosen career path.

Recommendation. Encourage degree and certification completion with wage supplements. In Oklahoma, the Child Care Wage Supplement program provides up to \$2,000 a year, depending on education level, to promote professional development, education, and longevity. The Cherokee Nation could build upon the existing Oklahoma Child Care Wage Supplement Program by providing a supplement of its own through subsidy additions.

Recommendation. Bolster scholarships for ECE professionals to offset tuition and fees, which will be necessary as the need for secondary education to become an early childhood professional across all programs increases. Currently, the Cherokee Nation Foundation does not offer a scholarship specifically for students wanting to enter the early childhood profession. One semester tuition at NSU for in-state tuition is \$7,169.60. This is likely an unattractive option for a profession making an average of \$22,790. Cherokee Nation could use degree-specific scholarships and university partnerships to attract more students into this profession.

Recommendation. Work with various stakeholders such as universities, CareerTech centers, and other credentialing and professional development organizations to create a system that accomplishes the following:

- ❖ credentials with labor market value, more advanced credentials should correlate with more advanced roles and higher compensation
- ❖ stackable credentials, which build upon each other and indicate newly acquired skills
- ❖ portable credentials that are accepted across early childhood programs and settings
- ❖ increase accessibility by offering opportunities online and in-person, weekends and evenings, etc.
- ❖ credit for previous learning, allowing ECE professionals to hone in on new skills
- ❖ measure for quality assurance by continuously monitoring and evaluating opportunities for using the latest research and promoting best practices

Expanding Affordability

Child care impacts how we work, when we work, and for many members in our community why we work. By one estimate, the ECE crisis, driven by high costs and low supply, cost the United States \$57 billion annually in lost earnings, productivity, and revenue *before* the

pandemic. The COVID-19 pandemic exacerbated this already existing ECE crisis. Affordability is key to accessibility and the United States Department of Health and Human Services defines affordable child care as 7 percent of a family's income, whereas in Oklahoma that cost averages 11.7 percent. Expanding affordability for caregivers include addressing both the high cost of ECE, as well coordinating services to holistically assist families meet basic needs.

1. Expanding Affordability - Service Coordination

ECE systems usually involve a patchwork of separate programs, funding sources, regulations, and governance structures. Families with young children often require additional programs to support their family. Ineffective coordination results in inconsistent, or even conflicting, policies, procedures, and quality/effectiveness. ECE program administrators are busy with implementation and meeting the needs of their own programs that they cannot devote resources to coordinate and align efforts with other programs.

Recommendation. Align and coordinate programs within the Cherokee Nation ECE, as well as among family support programs, by consolidating ECE programs under a Children and Youth Services division within Human Services.

This division could be led by a Deputy Executive Director of Human Services for Child and Youth Services. This new position could be mirrored with a Deputy Executive Director of Family Services under Human Resources. This would allow coordination among ECE programs and more effective resource coordination for families with children. Additional benefits could be realized in addressing family resource gaps, streamlining administrative processes, identifying opportunities for data sharing, and support to the overall ECE system.

2. Expanding Affordability - Employer Support Programs

Employers can foster a sense of engagement and community by including family issues as part of their Employee Assistance Program (EAP) and by offering workshops and classes on parenting, family literacy, child nutrition, and elder care. Although CN can only control employer support programs for its own employees, it can provide regional employers with an example of a supportive work place.

Recommendation. Offer flexible work schedules and remote work for caregivers to meet family needs. Vacations, school closures, and the general misalignment between the school day and work day all create gaps in ECE. This recommendation can be difficult based on actual work and times the CN is open to the public. Women are less likely to cite child care as a reason for becoming unemployed if they have access to remote work. The CN employee ECE survey

provided information regarding child care issues, which included affordability and availability. It also included a number of comments from employees regarding remote work during school virtual days, and other days public schools are closed.

Recommendation. Increase child care subsidies as employee benefits, which could alleviate child care stress for employees. Employers can subsidize the cost of child care either in part or in whole, or they can even reserve slots at nearby licensed facilities for employees. CN Human Resources is considering a Flexible Savings Account option that would allow employees to save child care costs “pre-tax”, which would reduce overall child care costs. These accounts can also be matched by the employer and additional research should be considered regarding matching based on income levels.

Recommendation. Provide on-site ECE, spaces, or supervision. Investment for on-site ECE is large as it requires space, security, and paid staff. However, the payoff can be great as recent research indicates employers recoup the ECE costs 50 to 200 percent through reduced turnover and absenteeism, as well as increased engagement. When designing an employee-based on-site ECE facility, employers should keep in mind: 1) flexible hours of operation, matching employee work schedules; 2) age and need appropriate care, ECE facilities offer care for infants up to five years old, but employer-based ECE accommodating children up to age 12 would greatly relieve caregiver stress when schools are closed such as summer or winter breaks; 3) sliding scale payments are critical for ECE access equity; and 4) involve senior leadership and caregiver input.