

A Report of School Readiness Need and the Costs to Serve All 3- and 4-Year-Old Children in 19 Priority School Districts

Connecticut State Department of Education

INTRODUCTION

The Departments of Education and Social Services have been implementing the Connecticut School Readiness and Child Day Care Grant Program since 1997. The program is an initiative that was designed to increase the supply of affordable, high-quality preschool programs, and expand and enhance access to preschool and child day-care programs in high-poverty areas. Since its inception in 1997, this legislative effort continues to allow 3- and 4-year-old children in 64 qualifying school districts (19 Priority School Districts and 45 Competitive Municipalities) to participate in a high-quality preschool and child-care experience. Children receive a high-quality preschool experience that includes quality components such as education and outreach, collaboration with community services, parent involvement, and referrals for health services including immunizations and screenings. Additional components are nutrition services, family literacy, transition planning for kindergarten, and professional development for staff. In June 2008, 9,600 3- and 4-year-old children were receiving preschool through this initiative and 8,759 were receiving such services in the priority school districts. In fiscal year 2009 (July 1, 2008, through June 30, 2009), \$70,734,179 was awarded to the priority school districts enabling the purchase of 961 additional spaces in approved preschool settings.

Since 2004, the Connecticut State Department of Education (CSDE) has issued a report entitled *School Readiness Need and the Costs to Serve all 3- and 4-year-old Children in 19 Priority School Districts* as required under CGS 10-4(d). This report provides an estimate of the number of children not being served in a preschool setting for 19 priority school districts and the costs associated in providing preschool programs to such children.

Section 10-16r(b) of the Connecticut General Statutes (CGS), in part, states that: ...“ (b) *The local school readiness council shall:...(3) assist in the identification of (A) the need for school readiness programs and the number of children not being served by such a program, and (B) for priority school districts pursuant to section 10-266p, the number of children not being served by such a program and the estimated operating cost of providing universal school readiness to eligible children in such districts who are not being served;...*” Additionally, Section 10-4(d) of the CGS requires that the State Board make reasonable efforts to ensure that summaries of the reports are submitted, in accordance with Section 11-4a of the General Statutes, to the joint standing committee of the General Assembly having cognizance of matters relating to education.

This report presents a summary of the responses provided by the priority school districts in accordance with the above legislative requirement. To meet this charge, the School Readiness Council for each of the 19 priority school districts determined and/or verified:

1. the number of children not being served and whose parents desire a program;
2. the type of spaces such children need; e.g. full-day/full-year; school-day/school-year and part-day/part-year programs;
3. the number of classrooms that will be required to serve such children; and
4. the local commitment and financial support necessary to reach the number of needed classrooms.

Similar to the previous year, the Connecticut Health and Educational Facilities Authority (CHEFA) managed the collection and analysis of data. This is part of a broader collaboration between CHEFA and CSDE for the expansion of early education. In order to establish the operating costs CHEFA applied the *Early Childhood Education Cost Modeling Tool* created by the Connecticut Early Childhood Alliance and CHEFA in collaboration with Hartford Area Childcare Collaborative.

Purpose:

This report provides a summary of information collected from the 19 priority school districts addressing the need and costs to serve all 3- and 4-year-old children in their districts. Utilizing data from the CSDE and the Department of Social Services (DSS) regarding children served in each of the 19 priority school districts, the data presented in this report reflects the estimated number of 3- and 4-year-old children not currently being served in a center-based preschool program.

This report, *A Report of School Readiness Need and the Costs to Serve All 3- and 4-year-old Children in 19 Priority School Districts*, becomes pertinent information for budget and policy decisions effecting the capacity efforts to support quality preschool programming.

Key Findings:

- Within the 19 priority school districts, 7,979 children are without a preschool program. It is projected that nearly 1,440 (20 percent) of the children will not seek a traditional preschool setting due to family choice, resulting in 6,445 additional children needing a program.
- Since the last “Meeting the Need” report was published, the number of available licensed and license-exempt spaces within the 19 priority school districts has increased by 774.
- The children estimated to be in need of a preschool program are projected to choose the following program slot types:
 - 3,886 full-day/full-year;
 - 1,316 school-day/school year; and
 - 1,243 part-day/part-year.
- The annual cost of operating early education services for the additional 6,445 children is approximately \$49,167,050. This cost will presumably be paid for by a combination of family fees, state subsidies and other grant support.
- Approximately 6,392 children will need 5,824 new spaces split between community-based facilities (3,876) and public school buildings (1,948).
- Total capital cost, not adjusted for future inflation, to develop these spaces is estimated to be \$262,369,736 with \$149,226,000 for community-based spaces and \$113,143,736 for public school spaces.

METHODOLOGY

The School Readiness Councils of 19 priority school districts were informed of their responsibilities as required under CGS Section 10-16r(b). The School Readiness Councils were asked to return a self-report, *Estimate of Potential Space Needs and Costs*, to the CSDE attested to by the chief elected official and the superintendent of schools. The self-report requested the following information:

- estimated number of children not being served;
- estimated number of children who will seek a school readiness program for either full-day/full-year, school-day/school year or part-day/part-year;
- number of classrooms needed for children who will need a school readiness program; and
- estimated local commitment to and financial support for these classrooms over a period of two years.

To assist School Readiness Councils in their preparation of this information, the CSDE provided the following to each Council Liaison:

- estimated 3- and 4-year-old child population based on statistics, as determined above;
- school readiness contracted slots allocated by the CSDE through the fiscal year 2009 request for proposal process; and
- DSS state-supported child enrollment for licensed day care centers.

Availability of Programs

To determine the availability of programs in the 19 priority school districts, the population of the 3- and 4-year-old cohort of children was first determined. Rather than using birth cohorts and aging this population forward, kindergarten and first grade populations were averaged¹. Since kindergarten and first grade are closer in time to pre-kindergarten, this is thought to be a more accurate method of determining the base population and therefore used as a basis from which to determine an estimated preschool population.

Once the base population was established, the total number of available spaces to serve pre-kindergarten children was determined. Since the actual capacity of early education programs may vary from licensed capacity, this report utilizes survey data collected by the School Readiness Councils in the 19 priority school districts to determine the actual number of spaces available, as provided under CGS Section 10-16r(b).

The difference between the estimated 3- and 4-year-old population and the actual capacity identified in each priority school district results in the number of children not served by a center-based preschool program. However, not all families would choose to place their child in a center-based early education program. A non-participation rate of 20 percent was determined for 2- and 4-year-old children not currently enrolled in an early education program. Evidence to validate the use of a 20 percent non-participation rate is supported through the National Household Education Surveys Program².

¹ Data from *Connecticut Education Data and Research* (CEDAR) database for October 2007.

² National Household Education Surveys Program (2005) by the National Center for Education Statistics.

Operating Costs

To determine operating costs, the *Early Childhood Education Cost Model*, a tool that provides an interactive spreadsheet to estimate the costs of center-based preschool programs was applied. The tool uses the following assumptions related to program slot type, teacher credential and compensation and class size. These assumptions are based on current statistics in the existing priority school districts.

Program Slot Type

With regard to the type of spaces that children might occupy in the next five years, it was assumed that in:

- full-day/full-year programs, 90 percent of the children will be enrolled in community-based programs, while 10 percent will be enrolled in public school programs;
- school-day/school-year programs, 60 percent of the children will be enrolled in community-based settings, while 40 percent will be enrolled in public school programs; and
- in part-day/part-year programs, 50 percent of the children will be enrolled in community-based spaces, while 50 percent will be enrolled in public school programs.

Teacher Credential and Compensation

Teachers in state-funded community-based settings are assumed to have a Child Development Associate (CDA) credential with 12 college credits in early childhood education and five years' teaching experience. Due to economic conditions, salaries were maintained at the same level as in last year's report. A teacher with such credentials will earn a base salary of approximately \$26,698 per year. The teacher aides are assumed to have five years' teaching experience, earning a base salary of \$17,798 per year. Public school teachers are assumed to have a bachelor's degree with one year experience and earn \$39,542 per year. Public school teacher aides with one year experience are assumed to earn \$16,480 per year.

Teacher benefits for the community-based programs (e.g. federal and state unemployment insurance costs, pension, vacation, etc.) are calculated at 28 percent of their salary. Public school teacher benefits are established at 50 percent of their base salary. Public school teacher salaries are calculated using a 39-week year, while the community-based teacher salaries are calculated using a 52-week year. The cost template factors in the need for additional staff to cover preparation, lunch and planning times. Planning time was assumed to be one hour per day for full-day/full-year programs, .5 hour per day for part-day/part-year programs and one hour for school-day/school-year programs.

Class Size

A class size of 18 children is used in the application of the *Early Childhood Education Cost Model* as this follows the CSDE's recommendation for class size in school readiness programs.

Capital Cost Estimation

To determine capital costs, the report presents space need and location projections for community and public school settings. Construction cost estimates are based on square footage costs from recent CHEFA-funded and new public school construction projects will be applied. Overall, the estimate for spaces is proportioned with 65 percent in community-based settings and 35 percent in public school-based settings.

Space Need and Location

The projection for spaces and location of such spaces are influenced by several conditions:

- anticipated growth of public school-based programs; there are assumed to be 5 percent more children in public school-based programs (i.e. 35 percent of school-day children, 55 percent of part-day children and no increase in full-day spaces) by the time facilities are completed;
- the projection assumes that part-day programs which offer morning and afternoon sessions can share the same space;
- the split between public school and community-based program is then averaged between the full-time, school-day and part-day components; and
- ten percent of community-based programs are assumed to be housed in public school buildings. In other words, the building will be owned by the public school system and rented to the community-based provider.

Calculation of Capital Cost and Debt Service

The calculations for capital cost and debt service are based on 100 square feet per child with a total development cost of \$385 per square foot for community-based centers. For public schools, a 125 square foot standard was applied with a total development cost set at \$465 per square foot.

The capital cost calculations assume that the annual interest rate for the loan will be at a tax exempt rate of 5 percent and the community-based provider will be required to fund 12 percent of the total project costs with their own funds. Public school construction will borrow 100 percent of the total project cost using state and local resources. For community-based providers, the debt service is reduced by 20 percent, since providers must pay approximately one fifth of the debt service out of operating subsidies.

RESULTS

The Number of Children Not Being Served

To assist towns in determining the number of children not being served, the CSDE supplied each School Readiness Council with 3- and 4-year-old child population data based upon data CSDE's *October 2007 Public and Non-Public Enrollment by Town of Residence Tables*. These data are part of the Connecticut Education Data and Research (CEDaR) database. Populations for kindergarten and first grade were added across categories including Public, Open Choice, Magnet, Interdistrict Cooperative Agreement, Homebound, Non-Public School Programs, Non-Public Preschool Programs, Non-Public Special Education Programs, and Others. The populations for kindergarten and first grade were added and assumed to be a close equivalent of the 3-year-old and 4-year-old population. See Table 1.

The CSDE also provided each School Readiness Council with information describing the extent of preschool services in each community.

Local School Readiness Councils confirmed the reliability of the Department of Public Health's child counts. Most districts used telephone and/or mail surveys to providers to determine how many 3- and 4-year-old children are currently enrolled in their programs. Others used responses from kindergarten registration and from local strategic school profiles. The numbers derived from these surveys, along with the existing numbers that are currently being served in other state and federal programs, were then deducted from the number of children enrolled in Kindergarten and first grade in each town. Children Not Being Served is the estimated population of 3- and 4-year-old children less the current capacity of the town. See Table 1.

Table I presents by priority school district the following statistics: (1) kindergarten and first grade population; (2) center-based capacity in 2008; (3) the change in licensed and school-based capacity since 2008; (4) current estimated capacity; and (5) estimated number of children not being served. Current estimated capacity was subtracted from the kindergarten and first grade population to establish the "number of children not being served."

The total estimate of children not being served in the 19 priority school districts is 7,979.

Table I
Estimated Number of Children in Priority School Districts Not Being Served

School District	K and 1st Grade Enrollment	Center Based Capacity 2008	Change in Capacity	Center Based Capacity 2009	Number of Children Not Being Served
Ansonia	525	372	131	503	22
Bloomfield	375	297	225	522	0*
Bridgeport	4,264	3,325	15	3,340	924
Bristol	1,367	945	275	1,220	147
Danbury	1,858	1,221	(15)	1,206	652
East Hartford	1,306	900	(109)	791	515
Hartford	4,065	2,894	265	3,159	906
Meriden	1,552	1,294	(148)	1,146	406
Middletown	999	830	65	895	104
New Britain	1,869	1,449	(107)	1,342	527
New Haven	3,504	2,717	68	2,785	719
New London	666	376	36	412	254
Norwalk	1,955	2,069	(341)	1,728	227
Norwich	925	84	548	632	293
Putnam	213	194	-	194	19
Stamford	2,974	3,262	(867)	2,395	579
Waterbury	3,384	2,417	(369)	2,048	1,336
West Haven	1,222	605	373	978	244
Windham	585	395	85	480	105
TOTAL	33,608	25,646	130	25,776	7,979

* Note: Since Bloomfield's 2009 capacity is greater than its estimated pre-kindergarten population, for the purpose of this study, the community's needs are being met. The negative number is disregarded since there is no negative demand.

Number of Children Who Need Preschool Programs

Overall, it was calculated that 7,979 3- and 4-year-old children are in need of a preschool program. Given the educational risk for children in a priority school district who do not have a

preschool experience, the CSDE encourages all 3- and 4-year-old children to attend a preschool. The National Center for Education Statistics evaluates participation rates of families nationally. Since families earning more than \$100,000 lack most barriers to accessing early education, the participation rate of this group can be considered the norm for families across income groups. The study found an average participation rate of 79 percent for 3-year-olds and 89 percent among 4-year-olds. Using this data, 20 percent of families not participating in the early education system are assumed to ‘opt out’ of center-based early education. Once this factor is applied to the number of children not served, the total number of children needing services is 6,445. See Table II

Table II presents the number of children not being served and projected participation levels.

Table II
Estimate Number of Children Who Need Preschool Programs

School District	Number of Children Not Being Served	CHEFA Projected at a 80% Minimum Participation
Ansonia	22	18
Bloomfield	0	-
Bridgeport	924	740
Bristol	147	118
Danbury	652	522
East Hartford	515	412
Hartford	906	725
Meriden	406	325
Middletown	104	84
New Britain*	527	475
New Haven	719	576
New London	254	204
Norwalk	227	182
Norwich	293	235
Putnam	19	16
Stamford	579	464
Waterbury	1,336	1,069
West Haven	244	196
Windham	105	84
TOTAL	7,979	6,445

* **Note:** The New Britain School Readiness Council conducted a survey of its community which indicated a 90 percent participation rate, which is used in this calculation.

Participation Distribution by School Readiness Program Type

Table III provides the distribution of School Readiness types that are available to 6,445 children projected to need a preschool program. The program types are full-day/full-year; school-day/school-year and part-day/part-year. A full-day/full-year preschool program operates up to ten hours per day, five days per week, for fifty weeks per year. A school-day/school-year program operates at least six hours per day, five days per week for a minimum of one hundred and eighty days per year. A part-day/part-year program operates at least 2.5 hours per day, five days per week for a minimum of one hundred and eighty days per year.

Based on information provided by the School Readiness Councils, CHEFA estimates that close to 60 percent or 3,890 of the children who need a preschool program will choose full-day/full-

year programs; about 20 percent or 1,316 of children will choose a school-day/school-year program; and about 20 percent or 1,243 will choose part-day/part-year programs.

Table III
Participants' Distribution by Program Types (After Participation Rate Calculation)

School District	CHEFA Projected at a 80% Minimum Participation	Full-Day/ Full-Year	School-Day/ School-Year	Part-Day/ Part-Year
Ansonia	18	13	-	5
Bloomfield	-	-	-	-
Bridgeport	740	590	92	58
Bristol	118	7	76	35
Danbury	522	391	-	131
East Hartford	412	222	66	124
Hartford	725	508	217	-
Meriden	325	325	-	-
Middletown	84	42	21	21
New Britain*	475	237	190	48
New Haven	576	432	115	29
New London	204	79	90	35
Norwalk	182	111	70	1
Norwich	235	98	59	78
Putnam	16	6	5	5
Stamford	464	278	93	93
Waterbury	1,069	427	214	428
West Haven	196	81	8	107
Windham	84	39	-	45
TOTAL	6,445	3,886	1,316	1,243

Estimate of Operating Cost for Community and Public School-Based Programs

Table IV presents the cost estimates derived through the *Early Childhood Education Cost Modeling Tool* to provide pre-school programs to an additional 6,445 preschool children. Cost projections are representative of the actual total cost of providing services, as compared to the state subsidies necessary to support the additional spaces. Current enrollment by program type data were used to model estimates of cost to provide a full-day/full-year program for community and public school-based programs will be \$37,230,600, assuming that 90 percent of enrollment will be in community-based programs and 10 percent in public school-based programs. The estimated cost for school-day/school-year for both community and public school-based programs will be \$8,659,280, with the assumption that 60 percent enrollment will be community-based and 40 percent public school-based programs. For part-day/part-year programs the cost will be \$3,277,170, assuming that the enrollment will be evenly split between community- and public school-based programs. The total operating cost of providing service to all program types will be \$49,167,050, which can be paid through a combination of state grants, family fees and other grant sources.

Table IV
Cost Estimates for Community-Based and Public School-Based Programs*

Program Types	Community Based		Public School-Based		Total Cost	Community Based	Public School-Based
	Per Hour \$	Per Slot \$	Per Hour \$	Per Slot \$			
Full-Day	3.50	8,753	6.81	17,030	\$ 37,230,600	90%	10%
School-Day	3.79	4,774	7.37	9,289	\$ 8,659,280	60%	40%
Part-Day	3.98	1,790	7.74	3,483	\$ 3,277,170	50%	50%
					\$ 49,167,050		

*Based on current community slot distribution.

Community-based teachers have a CDA with 12 credits in early childhood education and 5 years' experience (\$26,698); teacher aides have 5 years' experience (\$17,798).

Public school teachers have a BA with 1 year experience (\$39,542); teacher aides have 1 year experience (\$16,480).

It should be noted that the higher estimated cost of providing early education in public school-based programs is largely due to the higher education level of public school-based teachers, and correspondingly higher pay scale. Connecticut law, as well as accreditation standards of the National Association for the Education of Young Children (NAEYC), is increasing their educational requirements for community-based preschool teachers. Once bachelor degrees are required, the cost of providing care in community-based preschool programs will increase by approximately \$3,000 for each full-day slot, \$1,600 for each school-day slot, and \$600 for each part-day slot. This will have considerable impact on the cost of providing care in community-based settings.

Estimate of Capital Cost and Debt Service

In the future, public schools will demonstrate increasing responsibility to host preschool programs. Therefore, cost estimates to build future spaces should be conditioned on the projected location of spaces. Table V presents again the total number of 3- and 4-year-old children needing space but the proportions reserved for the location have been changed to accommodate the increasing potential for public schools to host preschool programs. The capital cost estimates are based on 85 percent of full-day/full-year spaces allocated to community programs and 15 percent to public schools; 55 percent of school-day/school-year spaces allocated to community programs and 45 percent to public schools; and 45 percent of part-day/part-year spaces allocated to community programs and 55 percent to public schools.

Table V
Space Need for Number of Three and Four-Year-Olds

Program Types	Total Children	Community-Based			Public School-Based		
		Percent	Number of Children	Spaces	Percent	Number of Children	Spaces
Full-Day School	3,886	85%	3,303	3,303	15%	583	583
Day	1,316	55%	724	724	45%	592	592
Part-Day	1,243	45%	559	279.5	55%	684	342
Total:	6,445		4,586	4,307		1,859	1,517
		Total spaces Needed:		5,824			

Further, 10 percent of the spaces for community-based programs (n=431) will rent public school space for their programs. Because of this assumption, a total of 2,122 spaces are needed in public school buildings and 3,876 spaces are needed in community-based buildings.

Table VI presents the Capital Cost and Debt Service for community-based and public school-based programs using the adjusted distribution of space to reflect the costs of 3,876 spaces in community-based programs and 1,948 spaces in public school-based programs. Community-based programs will require 100 square feet per child and public schools will require 125 square feet per child. The total development cost per square foot would be \$385 for community-based programs and \$465 for public school programs, a total development cost per child of \$38,500 and \$58,082, respectively.

The total capital cost for community-based spaces would be \$149,226,000 and \$113,143,736 for public school-based spaces. With an assumed interest rate of 5 percent for both community-based and public school-based programs, the total debt service is \$241,345,535 for community-based and \$246,593,078 for public school-based, a total debt service over the 30-year term of \$487,938,613.

Table VI
Calculation of Capital Cost and Debt Service

	Community-Based	Public School-Based
Square Feet Per Child	100	125
Construction Cost Per Square Foot	266	332
Total Development cost Per Square Foot	385	465
Total Development Cost Per Child	\$38,500	\$58,082
Total Capital cost	\$149,226,000	\$113,143,736
Assumed Interest Rate	6.50%	6.00%
Assumed Equity	12.00%	0.00%
Total Annual Debt Service	\$8,044,851	\$8,219,769
Total Debt Service	\$241,345,535	\$246,593,078
	\$262,369,736	
Total Capital Cost	\$16,264,620	
Grand Total Annual Debt Service	\$487,938,613	

CONCLUSION

The Connecticut State Board of Education and the Early Childhood Education Cabinet are committed to investments in quality preschool education. The *Connecticut State Board of Education Five-Year Comprehensive Plan 2006-2011*, the Early Childhood Cabinet's *Ready by 5 & Fine by 9: Connecticut's Early Childhood Investment Framework*, and the *Governor's Early Childhood Research and Policy Council's Early Childhood Investment Plan* all address the need to increase capacity efforts to support quality preschool programming as early education plays a significant role in the development of competent learners. All preschool children in Connecticut deserve access to quality care and educational opportunities so they can begin kindergarten with the foundation essential for future success in school. A great number of children in Connecticut do not participate in preschool programs because (1) there is not enough funding to establish spaces for all eligible children who need services; (2) market rate program tuitions are more than many low-income working class families can afford; and (3) there is a lack of open preschool spaces in most communities (*Closing the Achievement Gaps: Removing the Barriers to Preschool in Connecticut, A Report of the Connecticut State Board of Education, November 2003*). Consistent with its Position Statement on Preschool Programs and Services, the State Board of Education is committed to ensuring that every child whose family cannot afford preschool will have the opportunity to attend a high-quality program. Experiences and services must be appropriate to the child's age and state of development. As stated in the *Connecticut State Board of Education's Five-Year Comprehensive Plan for 2006-2011*, offering a high-quality preschool experience to all who need it is the foundation of a comprehensive approach to closing the achievement gaps. A concerted effort will be needed to ensure that all children in Priority School Districts have a preschool experience.

This report estimates that it will cost \$49,167,050 to provide early education services to the 6,445 preschool-age children reported as not being served throughout the 19 priority school districts. The majority of the children, approximately 60 percent, are reported to need a full-day/full-year program. It will also require \$16,264,620 of annual capital investment to provide 5,824 spaces in community-based and public school-based programs.

Nearly 90 percent of children currently needing full-day, full-year preschool will be served by community-based programs and 10 percent by public school-based programs. It is assumed that over time a larger proportion of children will choose public school-based programs, as these settings provide a more seamless transition from preschool to kindergarten and a greater involvement from the public schools. The cost to provide a preschool experience for Connecticut's children will increase over the next 10 years because preschool teachers in the community-based programs will be required to have a baccalaureate degree by the year 2015.

Connecticut's economic success requires children are prepared to succeed in their formal school experience. Quality early childhood programs ameliorate the risk factors that lead to achievement gaps. The State Departments of Education and Social Services, in collaboration with the local communities, are resolved to establish high-quality preschool programs for all children who need it, beginning in the most impacted communities.