

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

Connecticut Office of Early Childhood 2014

INTRODUCTION

Since 2004, the Connecticut State Department of Education (CSDE) has issued a report titled *School Readiness Need and the Costs to Serve all 3- and 4-year-old Children in 19 Priority School Districts* as required under Section 10-4(b) of the Connecticut General Statutes (C.G.S.). With the inception of the Connecticut Office of Early Childhood (OEC) in July 2014, the OEC completed this report. The data were collected by the CSDE in 2013 prior to the OEC's inception.

Under C.G.S. Section 10-16r(b), School Readiness Councils are required to report an estimate of the number of children in 19 priority school districts in need of a center-based preschool setting and the costs associated in providing such programs. This year's report also includes data from the Competitive School Readiness Grant Program in an effort to provide a complete picture of the need and cost to serve children under the entire School Readiness Grant. In addition to the summation of School Readiness Council reports, this document also provides a history of previously submitted reports and recommendations for consideration regarding reducing the number of children in need of a center-based preschool experience, while increasing the quality of such programs.

The State Departments of Education and Social Services have been implementing the Connecticut School Readiness and Child Day Care Grant Program since 1997 and has transitioned to the Office of Early Childhood (OEC) as of July 2014. The program allows 3- and 4-year-old children in 67 qualifying towns (19 priority school districts and 48 competitive municipalities) to participate in a high-quality preschool and child care experience. In fiscal year 2014 (July 1, 2013, through June 30, 2014), \$74,894,115 was awarded to priority school districts enabling them to contract with providers for 10,242 spaces in priority school districts. In the Competitive Grant Program, \$6,835,998 was awarded to eligible towns in the Competitive Grant Program enabling them to contract with providers for 1,170 spaces.

This report presents a summary of the responses provided by the priority school districts and the competitive grant towns, which outlines the responsibilities of the local School Readiness Councils, that includes assisting in the identification of the need for school readiness programs, providing the number of children not being served by such a program, and providing an estimated cost of universal school readiness programs to eligible children who are not being served. To meet this charge, the School Readiness Council in each of the 19 priority school districts and the 48 competitive grant towns completed a survey to determine and/or verify:

1. the number of children not being served and whose parents desire a program; and
2. the type of spaces such children need, e.g., full-day/full-year, school-day/school-year and part-day/part-year programs.

Similar to previous years, the Connecticut Health and Educational Facilities Authority (CHEFA) provided technical assistance to calculate the number of classrooms that will be required to serve children and the financial support necessary to reach the number of needed classrooms. 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 the Hartford Area Childcare Collaborative.

Purpose

The primary purpose of this report is to provide 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. Additional information regarding the data collected from the 48 competitive grant towns provides an inclusive picture of the entire School Readiness Grant Program. Data presented in this report reflect the estimated number of 3- and 4-year-old children not currently being served in a center-based preschool program, the estimated space needs to provide access to all 3- and 4-year-old children in priority school districts and competitive grant towns, the costs associated with providing such space and the costs associated with increasing the quality of programming through advancing the education of the current workforce.

Limitations

The findings represent estimates based on the narrow scope of the purpose of the report; to estimate the need and cost to serve 3- and 4-year-old children not currently served in a center-based type setting. Therefore, the estimates do not account for children who may be attending other types of settings, such as licensed family child care and/or licensed or unlicensed family, friend and neighbor settings nor does it account for children who attend center-based programs but do not benefit from state funds but could if there were funds available. The estimates also do not include the recent center-based preschool fiscal year 2015 expansion efforts such as the 1,020 School Readiness spaces, or any projections of the Smart Start initiative in meeting the estimated need. The findings can't be generalized to assume any current or future expansion would decrease the need by the number of spaces generated by expansion efforts.

Key Findings

- Over the past ten years, the number of contracted spaces has increased. The unmet need has decreased over the years 2007 to 2012. Between 2013 and 2014 the estimated population of preschool-age children has increased as well as the unmet need.
- Across the School Readiness Grant Program (priority school districts and competitive grant towns combined), it is estimated that 11,157 are not currently being served in a center-based school readiness program, however it is estimated that about 8,946 children would be in need of a space.
 - Within the 19 priority school districts, 7,648 children would not be able to access a center-based school readiness program due to lack of space. It is projected that nearly 1,409 (about 19 percent) of the children will not seek a center-based school readiness program due to family choice, resulting in 6,139 children potentially in need of a school readiness space.
 - Within the 48 competitive grant towns, 3,509 children would not be able to access a center-based school readiness program due to lack of space. It is projected that

702 (about 20 percent) of the children will not seek a center-based school readiness program due to family choice, resulting in 2,807 children potentially in a need of a school readiness space.

- An analysis of Professional Development Registry data indicates that early education teachers with bachelor degrees in community-based programs earn an average salary of \$34,000, greatly reducing the attractiveness of obtaining a degree in early childhood education. In contrast a beginning salary of a public school teacher in Connecticut is found to be about \$43,000 per year.
- The children estimated to be in need of a school readiness program are projected to fill the following program space types:
 - 5,619 full-day/full-year (3,915 in Priority Districts and 1,704 in Competitive Grant Towns)
 - 1,415 school-day/school-year (938 in Priority Districts and 477 in Competitive Grant Towns)
 - 1,612 part-day/part year (1,044 in Priority Districts and 568 in Competitive Grant Towns)
 - 302 extended-day/extended year (other) (242 in Priority Districts and 60 in Competitive Grant Towns)
- The annual cost of operating early education services for the additional 8,646 children in programs (5,897 in Priority School Districts and 2,749 in Competitive Grant Districts, excluding the extended day option) with teachers holding various educational levels is approximately \$88,864,042 (\$58,079,078 in Priority School Districts and \$30,784,964 in Competitive Grant Districts). This cost will presumably be paid for by a combination of family fees, state subsidies and other supports.
- Combining Priority School Districts and Competitive Grant Districts, approximately 8,646 children will need 7,939 new spaces split between community-based facilities (5,366) and public school buildings (2,573).
- Total capital cost, not adjusted for future inflation, to develop these spaces is estimated to be \$431,709,250, with \$206,571,750 for community-based spaces and \$225,137,500 for public school spaces.
 - In Priority School Districts, approximately 5,897 children will need 5,428 new spaces split between community-based facilities (4,056) and public school buildings (1,372).
 - Total capital cost, not adjusted for future inflation, to develop these spaces is estimated to be \$276,206,000, with \$156,156,000 for community-based spaces and \$120,050,000 for public school spaces.
 - In Competitive Grant Districts, approximately 2,749 children will need 1,511 new spaces split between community-based facilities (1,310) and public school buildings (1,200).
 - Total capital cost, not adjusted for future inflation, to develop these spaces is estimated to be \$155,454,250, with \$50,454,250 for community-based spaces and \$105,000,000 for public school spaces.

METHODOLOGY

The School Readiness Councils of the 19 priority school districts and the 48 competitive grant towns were informed of their responsibilities as required under Section 10-16r(b) of the C.G.S.. The School Readiness Councils were asked to return a self-report, *Estimate of Potential Space*

Needs, to the CSDE, attested to by the chief elected official and superintendent of schools or their designees. The self-report requested the following information:

- the average school readiness utilization;
- the estimated percentage of families who will seek a school readiness program for either full-day/full-year, school-day/school-year, part-day/part-year, extended-day or other;
- the estimated capacity to serve 3- and 4-year-old children across licensed center-based programs, public schools, parochial schools, charter schools and magnet schools;
- the estimated vacancies across licensed center-based programs, public schools, parochial schools, charter schools and magnet schools; and
- the percentage of families who would choose to send their child to a center-based program.

To assist School Readiness Councils in their preparation of this information, the CSDE provided the estimated population of 3- and 4-year-old children as determined by adding the kindergarten and first grade attendance figures based on the CSDE October 2011 database of Public and Non-Public Enrollment by Town of Residence.

Summary of “Meeting the Need” Reports

Over the past ten fiscal years, the number of contracted spaces purchased in community-based and public school-based settings with school readiness funds has increased steadily, while the need for space has also increased. This is in large part due to the increase in estimated preschool population over the past two years adding 1,815 children to the priority districts. The number of contracted spaces purchased in any given year does not directly correlate to a one-to-one ratio decrease in the need for space. Collectively, over the past ten years, the need for preschool has decreased by 2,169, while the contracted spaces offered increased by 3,265 in the priority districts. Overall, the difference between preschool spaces created and the identified need varies from year to year. Most years the need slightly decreases over time (See Figure 1). A number of variables reported by communities may contribute to this trend, such as: population trends, families enrolling children in non-subsidized spaces due to lack of availability, and/or the structure of the current state-funded program does not meet the needs of families work schedules and/or transportation issues.

In addition, the competitive grant towns serve considerably fewer children yet also show a need for more than twice the number served. The priority district data show that expansion over the years has somewhat decreased the need but has not decreased the need as the same rate as expansion. These data do not include the most recent fiscal year 2015 expansion of 1,020 spaces across the priority and competitive grant towns as the expansion occurred after the distribution of surveys.

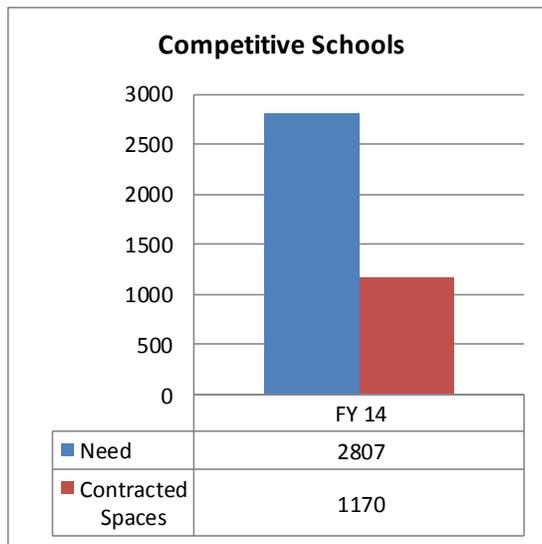
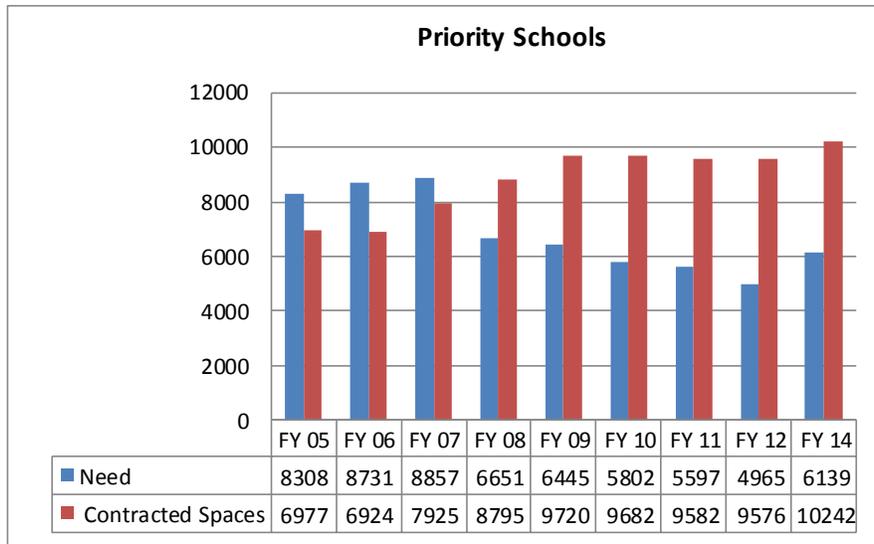


Figure 1: Comparison between contracted spaces and space need from FY 05 to FY 14 in Priority and Competitive Grant Towns

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 added together¹. 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 in priority school districts and competitive grant towns.

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

¹ Data from *Connecticut Education Data and Research (CEDAR)* database for October 2009.

Readiness Councils in the 19 priority school districts and the 48 competitive grant towns to determine the actual number of spaces available, as provided under Section 10-16r(b) of the C.G.S..

The difference between the estimated 3- and 4-year-old population and the actual capacity identified in each priority school district and competitive grant town resulted in the number of spaces needed to accommodate all 3- and 4-year-olds in priority school districts. 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 3- 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. However, this report reflects 18 priority school districts that chose to use the 20 percent non-participant rate and one priority district that chose to reflect lower (15 percent) non-participation rate based on their trend data.

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 space type, teacher credential and compensation and class size. These assumptions are based on current statistics in the existing priority school districts.

Program Space Type

With regard to the type of spaces that children might occupy in the coming years, it was assumed that in priority districts:

- full-day/full-year programs, 96 percent of the children will be enrolled in community-based programs, while 4 percent will be enrolled in public school programs;
- school-day/school-year programs, 15 percent of the children will be enrolled in community-based settings, while 85 percent will be enrolled in public school programs; and
- part-day/part-year programs, 30 percent of the children will be enrolled in community-based spaces, while 70 percent will be enrolled in public school programs.

With regard to the type of spaces that children might occupy in the coming years, it was assumed that in competitive grant towns:

- full-day/full-year programs, 68 percent of the children will be enrolled in community-based programs, while 32 percent will be enrolled in public school programs;
- school-day/school-year programs, 25 percent of the children will be enrolled in community-based settings, while 75 percent will be enrolled in public school programs; and
- in part-day/part-year programs, 4 percent of the children will be enrolled in community-based spaces, while 96 percent will be enrolled in public school programs.

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

Teacher Credential and Compensation

Teachers in state-funded, community-based settings are working toward meeting the legislative requirement to hold a bachelor's degree in an early childhood concentration by the year 2020. Teachers working in state funded programs on June 30, 2015, with a bachelor's degree in any subject area and at least twelve credits in early childhood will be grandfathered into the system as meeting the educator requirements. Current CT Professional Development Registry data indicate that the workforce has met the 2015 requirement of at least 50% of Teachers have a bachelor's degree and 12 early childhood credits, however focused effort on increasing that percentage to meet the 2020 requirement is necessary. Data from the CT Professional Development Registry indicates that an individual with bachelor's degree with a complete concentration in early childhood earn on average \$2,000-\$4,000 more than those with a bachelor's degree in any concentration with twelve credits in early childhood. A teacher with a bachelor's degree in an early childhood concentration and little or no job experience on average earn a base salary of approximately \$34,000 per year. Public school teachers have at least a bachelor's degree with a concentration in the endorsement area by which they are certified to teach. The beginning salary for public school teachers with such degrees is about \$43,000³ per year with increases scheduled according to union contracts.

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 .5 hour per day for school-day/school-year programs.

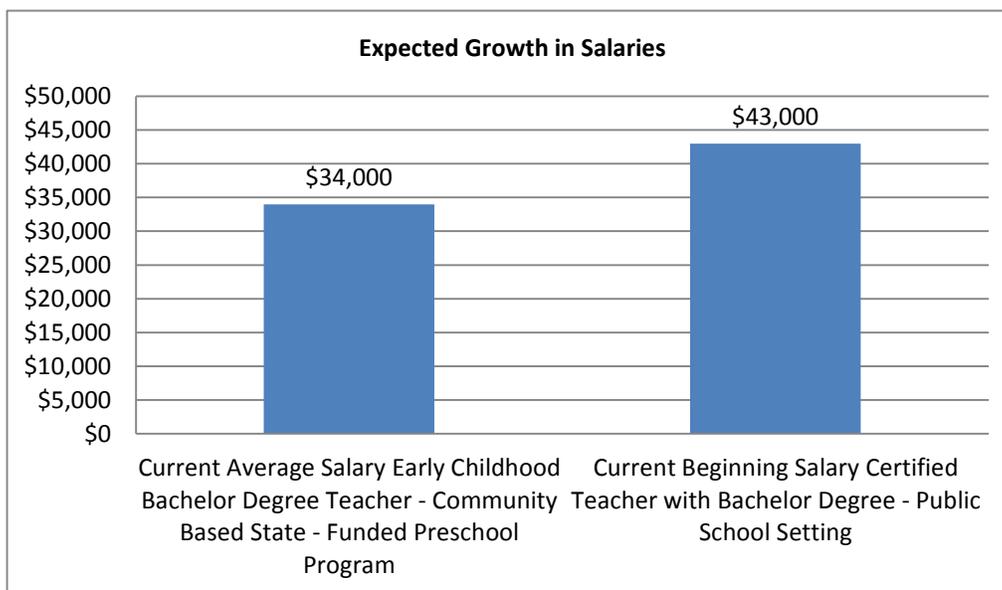


Figure 2: Comparison of staff salaries for bachelor's degree level

³ ConnCAN Connecticut Teacher Contract Database <http://teachercontracts.conncan.org/find-compare>

Figure 2 above illustrates the gap in salaries between current early childhood bachelor degree salary in state-funded programs and beginning salary level commensurate with public school with bachelor degreed teachers. By 2020, at least one teacher in every classroom, including School Readiness programs and Child Day Care contracted programs, will have a bachelor's degree. Data that created the average salary of bachelor level teachers in community-based state-funded preschool programs represents 555 respondents to the salary data field. There are currently 170 teachers in state-funded community-based programs holding a bachelor's degree with a full early childhood concentration and 147 teachers holding a bachelor's degree in any concentration with at least twelve early childhood credits. It is expected that the number of teachers with bachelor's degree in a full early childhood concentration will accelerate in the next few years as the workforce continues to make progress in meeting the educator requirement legislation.

It is important to note that full-day programs require 50 hours of instructional time per week, as well as teacher preparation time. The resulting full-time equivalence (FTE) requirement for both teachers and aides is 1.57 in each classroom. School-day and part-day programs require .93 and .43 FTEs respectively.

Total salaries are calculated by multiplying salaries by the number of existing FTE teachers in community-based programs (estimated to be 600, including 569 priority school district FTE teachers and 31 competitive grant town FTE teachers) and the projected number of new teachers estimated to 'meet the need' (estimated to be 452, including 343 priority school district FTE teachers and 109 competitive grant town FTE teachers). Please note that this increase does not include fringe benefits.

Class Size

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

Capital Cost Estimation

To determine capital costs, this report presents space need and location projections for community and public school settings. Construction cost estimates, 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 75 percent in community-based settings and 25 percent in public school-based settings for priority districts. For competitive grant towns cost estimates for spaces is proportioned with 35 percent in community-based settings and 65 percent in public-school based settings.

Space Need and Location

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

- The program space type and the distribution of those spaces across community-based or public school based settings.
- The projection assumes that part-day programs which offer morning and afternoon sessions can share the same space.

- Full-day, school-day and part-day components are then allocated to public school facilities.

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 175 square foot standard was applied with a total development cost set at \$500 per square foot⁴.

The capital cost calculations assume that the annual interest rate for the loan will be at a tax exempt rate of 5 percent for community based facilities, and 4.8 percent for public school facilities. 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 spaces needed to serve all 3- and 4-year-old children in priority school districts, the CSDE supplied each School Readiness Council with 3- and 4-year-old child population data based upon data in the CSDE's *October 2011 Public and Non-Public Enrollment by Town of Residence Tables* found in 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.

Local School Readiness Councils confirmed the reliability of the Department of Public Health's licensed capacity. Most districts used telephone and/or mail surveys 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. The "Number of Children Not Being Served" is the estimated population of 3- and 4-year-old children less the current capacity of the town.

Table I presents by priority school district and the competitive grant town the following statistics: (1) kindergarten and first grade population; (2) center-based capacity in 2011; (3) current estimated capacity; (4) the change in licensed and school-based capacity since 2011; (5) estimated number of children not being served; (6) the percentage of parents who would choose a center-based preschool setting; and (7) the total number of children needing a center-based preschool program. Current estimated capacity was subtracted from the kindergarten and first

⁴ Costs based on the 2011 priority project listing.

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 6,139 and the total estimate of children not being served in the 48 competitive grant towns is 2,807 for a total of 8,964 potentially un-served children across the 67 towns that comprise the School Readiness Grant Program.

Table I
Estimated Number of Children in Need of a Center-Based Space

Priority Districts

Town	Estimated Pre-K Population FY14	Center-based Capacity FY11	Center-based Capacity FY14	Change in Capacity	Children Not Being Served	Percent Choice	Unmet Need
Ansonia	470	474	398	-76	72	80%	58
Bloomfield	351	404	368	-36	-17	80%	0
Bridgeport	4760	3365	3423	58	1337	80%	1070
Bristol	1365	1097	1102	5	263	80%	210
Danbury	1994	1319	1423	104	571	80%	457
East Hartford	1237	653	850	197	387	80%	310
Hartford	4072	2886	3491	605	581	80%	465
Meriden	1706	1322	1362	40	344	80%	275
Middletown	987	914	879	-35	108	85%	92
New Britain	1899	1191	1067	-124	832	80%	666
New Haven	3612	3099	2442	-657	1170	80%	936
New London	658	736	660	-76	-2	80%	0
Norwalk	2204	1778	1918	140	286	80%	229
Norwich	928	1105	664	-441	264	80%	211
Putnam	192	187	178	-9	14	80%	11
Stamford	3375	2696	3069	373	306	80%	245
Waterbury	3486	3149	2860	-289	626	80%	501
West Haven	1375	1095	1009	-86	366	80%	293
Windham	623	423	483	60	140	80%	112
TOTALS	35294	27893	27646	-247	7648		6139

Competitive Grant Towns

Town	Estimated Pre-K Population FY14	Center-based Capacity FY12	Center-based Capacity FY14	Change in Capacity	Children Not Being Served	Percent Choice	Unmet Need
Andover	68	36	52	16	16	80%	13
Ashford	85	63	48	-15	37	80%	30
Beacon Falls	138	0	56	56	82	80%	66
Brooklyn	157	120	158	38	0	80%	0
Canterbury	77	109	83	-26	0	80%	0
Chaplin	51	50	52	2	0	80%	0
Colchester	351	434	256	-178	95	80%	76
Coventry	262	186	166	-20	96	80%	77
Derby	274	145	145	0	129	80%	103
East Haven	520	238	259	21	261	80%	209
Eastford	31	19	17	-2	14	80%	11
Ellington	376	263	255	-8	121	80%	97
Enfield	810	953	856	-97	0	80%	0
Greenwich	1316	919	2073	1154	0	80%	0
Griswold	291	155	236	81	55	80%	44
Groton	971	1006	805	-201	166	80%	133
Hamden	1037	741	628	-113	409	80%	327
Hampton	28	54	20	-34	8	80%	6
Hebron	219	55	109	54	110	80%	88
Killingly	357	282	266	-16	91	80%	73
Lebanon	159	100	129	29	30	80%	24
Ledyard	373	268	181	-87	192	80%	154
Lisbon	64	64	32	-32	32	80%	26
Manchester	1182	1070	1242	172	0	80%	0
Mansfield	268	342	305	-37	0	80%	0
Milford	915	756	1293	537	0	80%	0
Naugatuck	712	508	471	-37	241	80%	193
North Canaan	74	35	36	1	38	80%	30
Plainfield	361	181	201	20	160	80%	128
Plainville	304	339	381	42	0	80%	0
Plymouth	250	167	169	2	81	80%	65
Scotland	30	54	30	-24	0	80%	0
Seymour	331	163	160	-3	171	80%	137
Shelton	662	815	750	-65	0	80%	0
Sprague	77	102	92	-10	0	80%	0
Stafford	247	231	185	-46	62	80%	50
Sterling	87	0	0	0	0	0%	0
Stratford	1052	1136	902	-234	150	80%	120
Thomaston	155	115	81	-34	74	80%	59
Thompson	160	194	205	11	0	80%	0
Torrington	772	556	517	-39	255	80%	204
Vernon	585	606	381	-225	204	80%	163
Voluntown	60	19	44	25	16	80%	13
West Hartford	1470	1512	1516	4	0	80%	0
Winchester	187	265	274	9	0	80%	0
Windsor	479	497	936	439	0	80%	0
Windsor Locks	259	0	314	314	0	80%	0
Wolcott	323	250	210	-40	113	80%	90
Total	19017	16173	17577	1404	3509		2807

Number of Children Who Need School Readiness Programs

Overall, it was calculated that 8,946 3- and 4-year-old children are in need of a preschool program (6,139 children in priority district and 2,807 in competitive grant towns. Given the educational risk for children in a priority school district or a town in the lowest fiftieth wealth rank or a town having one or more priority schools who do not have a preschool experience, the OEC encourages all families of young children to seek educational opportunities for their children. 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, or an alternative percentage as reported by town, is applied to the number of children not served, the total number of children needing services is 8,946 across priority (6,139) and competitive grant towns (2,807).

Participation Distribution by School Readiness Type

Table II provides the distribution of School Readiness types that are available to 8,946 children projected to need a preschool program. The program types are full-day/full-year, school-day/school-year, part-day/part-year, and other, typically referred to as a wrap-around program. A full-day/full-year preschool program operates up to 10 hours per day, five days per week, for 50 weeks per year. A school-day/school-year program operates at least six hours per day, five days per week for a minimum of 180 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 180 days per year. Anecdotally, towns are requesting flexibility regarding the hours, number of days and days per year the current system offers in order to meet the unique needs of their community (e.g., accommodations in schedule to allow for families working nontraditional shifts and hours).

Based on information provided by the School Readiness Councils in priority school districts and competitive grant towns, it is estimated that close to 63 percent or 5,619 of the children who need a preschool program will choose full-day/full-year programs; about 16 percent or 1,415 of families will choose a school-day/school-year program; about 18 percent or 1,612 families will choose part-day/part-year programs; and about 3 percent or 300 families would like an alternative to the traditional program offerings. Please note that for purposes of developing a cost estimate, the category of “Other” was not considered in the calculation.

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

Priority Districts

Town	Unmet Need	FD	SD	PD	Other
Ansonia	58	43	3	12	0
Bloomfield	0	0	0	0	0
Bridgeport	1070	963	107	0	0
Bristol	210	90	21	99	0
Danbury	457	365	0	69	23
East Hartford	310	130	84	96	0
Hartford	465	209	232	0	23
Meriden	275	220	14	41	0
Middletown	92	62	10	20	0
New Britain	666	366	7	293	0
New Haven	936	468	281	47	140
New London	0	0	0	0	0
Norwalk	229	153	23	50	2
Norwich	211	127	0	84	0
Putnam	11	4	3	4	1
Stamford	245	179	24	24	17
Waterbury	501	295	90	115	0
West Haven	293	176	18	64	35
Windham	112	65	22	25	0
TOTALS	6139	3915	938	1044	242

Competitive Grant Towns

Town	Unmet Need	FD	SD	PD	Other
Andover	13	1	4	7	1
Ashford	30	2	14	14	0
Beacon Falls	66	53	9	4	0
Brooklyn	0	0	0	0	0
Canterbury	0	0	0	0	0
Chaplin	0	0	0	0	0
Colchester	76	22	24	26	4
Coventry	77	31	15	31	0
Derby	103	99	4	0	0
East Haven	209	188	0	21	0
Eastford	11	0	7	4	0
Ellington	97	58	24	15	0
Enfield	0	0	0	0	0
Greenwich	0	0	0	0	0
Griswold	44	13	16	13	2
Groton	133	51	3	63	16
Hamden	327	197	65	65	0
Hampton	6	0	5	1	0
Hebron	88	44	31	4	9
Killingly	73	32	9	32	0
Lebanon	24	0	1	23	0
Ledyard	154	125	29	0	0
Lisbon	26	3	0	21	2
Manchester	0	0	0	0	0
Mansfield	0	0	0	0	0
Milford	0	0	0	0	0
Naugatuck	193	79	31	75	8
North Canaan	30	27	0	3	0
Plainfield	128	70	28	17	13
Plainville	0	0	0	0	0
Plymouth	65	24	14	26	1
Scotland	0	0	0	0	0
Seymour	137	127	5	5	0
Shelton	0	0	0	0	0
Sprague	0	0	0	0	0
Stafford	50	10	22	14	4
Sterling	0	0	0	0	0
Stratford	120	60	30	30	0
Thomaston	59	41	0	18	0
Thompson	0	0	0	0	0
Torrington	204	163	41	0	0
Vernon	163	131	24	8	0
Voluntown	13	1	5	7	0
West Hartford	0	0	0	0	0
Winchester	0	0	0	0	0
Windsor	0	0	0	0	0
Windsor Locks	0	0	0	0	0
Wolcott	90	52	17	21	0
TOTALS	2809	1704	477	568	60

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

Table III presents the cost estimates derived through the *Early Childhood Education Cost Modeling Tool* to provide preschool programs to an additional 5,897 preschool children in priority school districts and 2,749 preschool children in competitive grant towns, totaling 8,646. 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.

Table IIIa presents the cost estimates for expansion within priority school districts. The cost will be \$45,889,124 assuming that 96 percent of enrollment will be in community-based programs and 4 percent in public school-based programs. The estimated cost for school-day/school-year for both community and public school-based programs will be \$8,799,928, with the assumption that 15 percent enrollment will be community-based and 85 percent public school-based programs. For part-day/part-year programs, the cost will be \$3,390,026, assuming that 30 percent enrollment will be community-based and 70 percent public school-based programs. The total operating cost of providing service to all program types, under bachelor degree teacher credential levels, will be \$58,079,078 which can be paid through a combination of state grants, family fees and other sources.

Table IIIb presents the cost estimates for expansion within competitive grant towns, the cost will be \$30,784,964 assuming that 68 percent of enrollment will be in community-based programs and 32 percent in public school-based programs. The estimated cost for school-day/school-year for both community and public school-based programs will be \$4,560,868, with the assumption that 25 percent enrollment will be community-based and 75 percent public school-based programs. For part-day/part-year programs, the cost will be \$1,952,495, assuming that 4 percent enrollment will be community-based and 96 percent public school-based programs. The total operating cost of providing service to all program types, under bachelor degree teacher credential levels, will be \$30,784,964 which can be paid through a combination of state grants, family fees and other sources.

Table III
Cost estimates to provide preschool programs to an additional 5,897 preschool children in Priority School Districts and 2,749 preschool children in Competitive Grant Districts, totaling 8,646 children

Current Standards

	Community Based		Public		Total Cost	Community Based	Public
	Per hour	Per Slot	Per hour	Per Slot			
Full-Time	\$ 4.75	\$ 11,361	\$ 8.52	\$ 20,370	\$70,160,695.92	88%	12%
Part-Day	\$ 5.16	\$ 2,324	\$ 9.26	\$ 4,167	\$ 5,342,520.36	21%	79%
School Day	\$ 4.66	\$ 5,035	\$ 8.36	\$ 9,028	\$13,360,826.20	19%	81%
					\$ 88,864,042		

- New Community Based Teachers are assumed to have a BA with no experience(\$34,000); Teacher Aides have 5yrs exp. (\$24,500)
- Public teachers have a starting salary (\$43,000); Teacher Aides have 5 yr. exp. (\$24,500)

Table IIIa
Cost Estimates for Community-Based and Public School-Based Programs
Priority School Districts

	Community Based		Public		Total Cost	Community Based	Public
	Per hour	Per Slot	Per hour	Per Slot			
Full-Time	\$ 4.75	\$ 11,361	\$ 8.52	\$ 20,370	\$45,889,124.40	96%	4%
Part-Day	\$ 5.16	\$ 2,324	\$ 9.26	\$ 4,167	\$ 3,390,025.80	30%	70%
School Day	\$ 4.66	\$ 5,035	\$ 8.36	\$ 9,028	\$ 8,799,928.20	15%	85%
					\$ 58,079,078		

- teachers in community-based programs have a BA degree and one year experience (\$34,000); teacher aides with less than a BA (\$24,500)
- teachers in public school programs have a BA with one year experience (\$43,000); teacher aides have one year experience (\$24,500)

Table IIIb
Cost Estimates for Community-Based and Public School-Based Programs
Competitive Grant Towns

	Community Based		Public		Total Cost	Community Based	Public
	Per hour	Per Slot	Per hour	Per Slot			
Full-Time	\$ 4.75	\$ 11,361	\$ 8.52	\$ 20,370	\$24,271,571.52	68%	32%
Part-Day	\$ 5.16	\$ 2,324	\$ 9.26	\$ 4,167	\$ 1,952,494.56	4%	96%
School Day	\$ 4.66	\$ 5,035	\$ 8.36	\$ 9,028	\$ 4,560,898.00	25%	75%
					\$ 30,784,964		

- teachers in community-based programs have a BA degree and one year experience (\$34,000); teacher aides with less than a BA (\$24,500)
- teachers in public school programs have a BA with one year experience (\$43,000); teacher aides have one year experience (\$24,500)

It should be noted that the higher estimated cost of providing early education in public school-based programs is higher pay scale. Connecticut legislation has increased its educational requirements for teachers working in state-funded programs serving infants, toddlers, and preschool age children. Bachelor degrees are now required beginning 2015 for half of the teachers and all teachers will need a bachelor's degree by 2020. Although we are on pace with meeting the 2015 requirement, a concerted effort will be needed to meet the 2020 requirement.

To address the increasing salary needed to attract and retain bachelor level teachers, tables IV, IVa and IVb show the estimated monthly rates of providing care in community-based preschool programs. Using the Cost Modeling Tool to calculate full-time, part-day, and school-day rates, the current full day rate increases by approximately \$1,676 for each full-day slot, \$743 for each school-day slot and \$343 for each part-day slot for a total estimated cost of \$19,973,193 (\$17,335,592 in priority school districts and \$2,637,601 in competitive grant towns).

Table IV
Salary Costs for Priority and Competitive Grant Districts

	Children Served	Current Salaries		Increased Salaries	
		Cost per Slot	Total Cost	Cost per Slot	Total Cost
Full-Time:	11,503	\$ 11,361	\$ 130,681,493	\$13,037	\$ 149,959,918
Part-Time:	822	\$ 2,324	\$ 1,911,165	\$ 2,667	\$ 2,193,234
School Day:	555	\$ 5,035	\$ 2,796,691	\$ 5,778	\$ 3,209,390
			\$ 135,389,348		\$ 155,362,542
Difference:					\$ 19,973,193

Table IVa
Salary Costs for Priority School Districts

	Children Served	Current Salaries		Increased Salaries	
		Cost per Slot	Total Cost	Cost per Slot	Total Cost
Full-Time:	10,024	\$ 11,361	\$ 113,886,300	\$13,037	\$ 130,687,060
Part-Time:	787	\$ 2,324	\$ 1,828,058	\$ 2,667	\$ 2,097,862
School Day:	357	\$ 5,035	\$ 1,795,985	\$ 5,778	\$ 2,061,013
			\$ 117,510,342		\$ 134,845,935
Difference:					\$ 17,335,592

Table IVb
Salary Costs for Competitive Grant Towns

	Children Served	Current Salaries		Increased Salaries	
		Cost per Slot	Total Cost	Cost per Slot	Total Cost
Full-Time:	1,478	\$ 11,361	\$ 16,795,194	\$13,037	\$ 19,272,858
Part-Time:	36	\$ 2,324	\$ 83,106	\$ 2,667	\$ 95,372
School Day:	199	\$ 5,035	\$ 1,000,706	\$ 5,778	\$ 1,148,378
			\$ 17,879,006		\$ 20,516,607
Difference:					\$ 2,637,601

Estimate of Capital Cost and Debt Service

Table V presents the total number of 3- and 4-year-old children needing space, reflecting proportions served by public- and community-based providers and includes priority school districts and competitive grant towns together.

Table Va presents the same data, but only for priority school districts. The capital cost estimates are based on 96 percent of the full-day/full-year spaces allocated to community programs and 4 percent to public schools, as is the current distribution; 15 percent of school-day/school-year

spaces allocated to community programs and 85 percent to public schools; and 30 percent of part-day/part-year spaces allocated to community programs and 70 percent to public schools.

Table Vb presents the data only for competitive grant towns. The capital cost estimates are based on 68 percent of the full-day/full-year spaces allocated to community programs and 32 percent to public schools; 25 percent of school-day/school-year spaces allocated to community programs and 75 percent to public schools; and 4 percent of part-day/part-year spaces allocated to community programs and 96 percent to public schools.

Table V
Space Need for Number of Three- and Four-Year-Olds
Priority School Districts and Competitive Grant Towns

Number of 3 and 4 year-olds needing space:							
	Total	Community Based			Public		
	Children	Percent	Number	Spaces	Percent	Number	Spaces
Full-Time:	5,619	88%	4,917	4,917	12%	702	702
Part-Time:	1,415	21%	300	150	79%	1,115	557
School Day:	1,612	19%	299	299	81%	1,313	1,313
Total:	8,646		5,516	5,366		3,130	2,573
Total Spaces Needed:			7,939				

The assumed split between Community Based and Public Programs is based upon the projection 5 years out.

Table Va
Space Need for Number of Three- and Four-Year-Olds
Priority School Districts Only

Number of 3 and 4 year-olds needing space:							
	Total	Community Based			Public		
	Children	Percent	Number	Spaces	Percent	Number	Spaces
Full-Time:	3,915	96%	3,758	3,758	4%	157	157
Part-Time:	938	30%	281	141	70%	657	328
School Day:	1,044	15%	157	157	85%	887	887
Total:	5,897		4,196	4,056		1,701	1,372
Total Spaces Needed:			5,428				

The assumed split between Community Based and Public Programs is based upon the projection 5 years out.

Table Vb
Space Need for Number of Three- and Four-Year-Olds
Competitive Grant Towns

Number of 3 and 4 year-olds needing space:							
	Total Children	Community Based			Public		
		Percent	Number	Spaces	Percent	Number	Spaces
Full-Time:	1,704	68%	1,159	1,159	32%	545	545
Part-Time:	477	4%	19	10	96%	458	229
School Day:	568	25%	142	142	75%	426	426
Total:	2,749		1,320	1,310		1,429	1,200
Total Spaces Needed:			2,511				

The assumed split between Community Based and Public Programs is based upon the projection 5 years out.

Facility development is assumed to utilize the CHEFA Tax-Exempt Financing Program for private providers and the School Construction Grant program for public school space. It is important to note that the Tax-Exempt Loan program depends on child care subsidies (ie. School Readiness operating subsidies) as one of the sources of repayment. Since the Competitive Grant program does not commit the State to providing subsidies over the term of the loan, the Tax-Exempt Loan Program can not be utilized in Competitive Grant Districts as it is currently legislated. In order to utilize the Tax-Exempt Program in these districts, the Competitive Grant program would have to be modified to allow for longer term commitment of operating subsidies.

Table VI presents the Capital Cost and Debt Service for community-based and public school-based programs combining priority school districts and competitive grant towns using the adjusted distribution of space to reflect the costs of 5,366 spaces in community-based programs and 2,573 spaces in public school-based programs.

The total capital cost for community-based spaces would be \$206,571,750 and \$225,137,500 for public school-based spaces. With an assumed interest rate of 5 percent and 4.8 percent for community-based and public school-based programs respectively, the total debt service is \$354,757,624 for community-based and \$429,399,860 for public school-based, a total debt service over the 30-year term of \$784,157,484.

Table VIa presents the Capital Cost and Debt Service for community-based and public school-based programs in Priority Districts only, using the adjusted distribution of space to reflect the costs of 4,056 spaces in community-based programs and 1,372 spaces in public school-based programs.

The total capital cost for community-based spaces would be \$156,156,000 and \$120,050,000 for public school-based spaces. With an assumed interest rate of 5 percent and 4.8 percent for community-based and public school-based programs respectively, the total debt service is \$268,175,738 for community-based and \$228,898,756 for public school-based, a total debt service over the 30-year term of \$497,114,494.

Table VIb presents the Capital Cost and Debt Service for community-based and public school-based programs in competitive grant towns only, using the adjusted distribution of space to reflect the costs of 1,310 spaces in community-based programs and 1,200 spaces in public school-based programs. These calculations are assumed if the loan program were to become available to competitive grant towns.

The total capital cost for community-based spaces would be \$50,424,250 and \$105,000,000 for public school-based spaces. With an assumed interest rate of 5 percent and 4.8 percent for community-based and public school-based programs respectively, the total debt service is \$86,648,004 for community-based and \$200,264,218 for public school-based, a total debt service over the 30-year term of \$286,912,222.

In all cases, community-based programs will require 100 square feet per child and public schools will require 175 square feet per child. The total development cost per square foot is projected at \$385 for community-based programs and \$500 for public school programs, resulting in a total development cost per child of \$38,500 and \$87,500, respectively.

Table VI
Calculation of Capital Cost and Debt Service
Priority School Districts and Competitive Grant Towns

Calculation of Capital Cost and Debt Service Over 30 Years		
	Community Based	Public
Square Feet Per Child:	100	175
Construction Cost Per Square Foot:	\$ 266	\$ 357
Total Development Cost Per Square Foot:	\$ 385	\$ 500
Total Development Cost Per Child:	\$38,500	\$ 87,500
Total Capital Cost:	\$206,571,750	\$225,137,500
Assumed Interest Rate:	5.0%	4.8%
Borrower Cash Contribution:	12.0%	0.0%
Total Borrowing Needed:	\$181,783,140	\$225,137,500
Total Annual Debt Service:	\$11,825,254	\$14,313,329
Total Debt Service Over 30 Years:	\$354,757,624	\$429,399,860
Public Plus Community Based Costs		
Total Capital Cost:	\$431,709,250	
Total Debt Service:	\$26,138,583	
Total Debt Service Over 30 Years:	\$784,157,484	

Table VIa
Calculation of Capital Cost and Debt Service
Priority Districts Only

	Community Based	Public
Square Feet Per Child:	100	175
Construction Cost Per Square Foot:	\$ 266	\$ 357
Total Development Cost Per Square Foot:	\$ 385	\$ 500
Total Development Cost Per Child:	\$38,500	\$ 87,500
Total Capital Cost:	\$156,156,000	\$120,050,000
Assumed Interest Rate:	5.0%	4.8%
Borrower Cash Contribution:	12.0%	0.0%
Total Borrowing Needed:	\$137,417,280	\$120,050,000
Total Annual Debt Service:	\$8,939,191	\$7,632,292
Total Debt Service Over 30 Years:	\$268,175,738	\$228,968,756
Public Plus Community Based Costs		
Total Capital Cost:	\$276,206,000	
Total Debt Service:	\$16,571,483	
Total Debt Service Over 30 Years:	\$497,144,494	

Table VIb
Calculation of Capital Cost and Debt Service
Competitive Grant Towns Only

	Community Based	Public
Square Feet Per Child:	100	175
Construction Cost Per Square Foot:	\$ 266	\$ 357
Total Development Cost Per Square Foot:	\$ 385	\$ 500
Total Development Cost Per Child:	\$38,500	\$ 87,500
Total Capital Cost:	\$50,454,250	\$105,000,000
Assumed Interest Rate:	5.0%	4.8%
Borrower Cash Contribution:	12.0%	0.0%
Total Borrowing Needed:	\$44,399,740	\$105,000,000
Total Annual Debt Service:	\$2,888,267	\$6,675,474
Total Debt Service Over 30 Years:	\$86,648,004	\$200,264,218
Public Plus Community Based Costs		
Total Capital Cost:	\$155,454,250	
Total Debt Service:	\$9,563,741	
Total Debt Service Over 30 Years:	\$286,912,222	

CONCLUSION

The OEC is committed to quality services for children from birth to age 5. All children in Connecticut deserve access to quality care and educational opportunities so they can begin kindergarten with the foundations 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 families can afford; and (3) there is a lack of open preschool spaces in most communities. Experiences and services must be appropriate to the child's age and stage of development. A concerted effort will be needed to ensure that all children in Connecticut have a high quality preschool experience.

This report estimates that it will cost \$88,864,042 to provide early education services to 8,646 (5,897 preschool children in priority school districts and 2,749 preschool children in competitive grant towns) preschool-age children reported as not being served throughout the 19 priority school districts and 48 competitive grant towns. The majority of the children, approximately 63 percent, are reported to need a full-day/full-year program. It will also require \$26,138,583 of annual capital investment (\$16,571,483 in Priority School Districts and \$9,563,741 in Competitive Grant Districts) to provide 7,939 spaces in community-based and public school-based programs 5,428 in Priority School Districts and 2,511 in Competitive Grant Districts).

Nearly 96 percent of children currently needing full-day, full-year preschool will be served by community-based programs and 4 percent by public school-based programs. Projections assume that children will continue to utilize School Readiness spaces with the same ratios of full-day/full-year, school-day/school-year and part-day/part-year spaces in public and community-based programs. The cost to provide a quality preschool experience for Connecticut's children will increase over the next three years because at least 50 percent of preschool teachers in the state-funded programs will be required to have a bachelor's degree by the year 2015 and salaries will need to be considered as a major incentive to recruit and retain staff under this qualification. Further, a major investment in preschool programs will be needed as 100 percent of teachers in state-funded programs will be required to have a bachelor's degree by the year 2020.

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

RECOMMENDATIONS

Governor Malloy's commitment to providing all families access to quality early childhood education opportunities is aligned with the OEC vision that all young children in Connecticut are safe, healthy, learning and thriving and each child is surrounded by a strong network of nurturing adults who deeply value the importance of the first years of a child's life and have the skills, knowledge, support and passion to meet the unique needs of every child. The following recommendations reflect the Office of Early Childhood current efforts and propose continued support to address the need and cost to serve preschool children across the School Readiness Grant Program serving priority districts and competitive grant towns:

- Continue to build on the recent efforts to align early childhood service grants addressing parity in policy, reimbursement, and administrative support. Recent rate parity efforts to align the Priority and Competitive School Readiness Grants show a commitment to begin creating an integrated state-funded early child care and education program; a strategic goal of the OEC. While building a unified system, conduct a broader needs survey to determine future expansion efforts that could be implemented within the context of a newly defined system of delivery.
- Engage a workgroup or commission a study to explore viable options to address compensation parity for teachers with bachelor's degrees working in community-based settings with those teaching in a public school setting. Higher education institutions are making a concerted effort to increase capacity and enhance the instruction in our higher education institutions. The 13 approved colleges to offer the Early Childhood Teacher Credential (ECTC) have agreed to base their early childhood program of study on the NAEYC professional preparation standards as well as utilize key assessments to monitor competency development. As the workforce seeks parity in compensation, the higher education institutions are working toward parity of standards across institutions.
- Conduct a survey of programs to identify the cost of operating and maintaining a high quality early childhood program. The current cost modeling tool should be reassessed for inclusion of compensation parity and incremental increases, cost of maintaining national approvals such as NAEYC and Head Start, and other indicators of high quality preschool programming.
- Advance development and implementation of a Quality Improvement System that advocates for and monitors program development and improvement, professional development, family engagement, and systems accountability across sectors.

The OEC is committed to collaborating with multiple stakeholders in building, implementing, and assessing systems of education and service delivery to improve the conditions of all Connecticut's children and families.