Methodology: Child Care Demand

The study of estimating demand for child care helps to demonstrate the availability of child care. Increase in parent's labor force participation leads an increased demand for child care, that creates unmet need for family with young children. Based on 1990 Census, Kids Count 1994 estimated 55 % as a potential demand for child care[1]. The objective of our study is to show the recent trend of child care demand, and examines better methodology using the county's data. There are four options analyzed below using

1. Regulated full-time care spaces in DCC
2. Kids Count 1994
3. National estimation of parental care
4. Labor force profile by Census 1990

With the best estimation of needing care, the fund's liability will be projected. The ultimate goal of this study is to project the fund's liability with a realistic calculation.

Data
Census 2000 provides
- Total number of children under age 6 : 5,267
- Total number of families with children under age 6 (so long as one child in the family is under age 6) : 3,956
- Average number of children under age 6 per family : 5,267 / 3,956 = 1.33

NYSED[2] provides
- Children in kindergarten in Tompkins county: 895

Age of Children	# of children	# of families
Under age 6	5,267	3,956
Under age 6 in school (kindergarten)	895	673[3]
Under age 6 not in school	**4,372**	**3,283**

Option 1: Regulated Care Spaces in DCC
The first estimation uses the regulated care spaces in DCC. Since the fund is designed to provide the subsidy for children in the regulated care, the regulated care spaces will be a good measurement to estimate the demand. Part-time care spaces are divided by half, in order to avoid double counting with other care arrangements.[4] Total full time regulated spaces is 2,070 which is 47 % of total children under age 6 not in school.

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[1] Based on the Census 1990, Kids Count 1994 estimated the potential demand for care for children 0-5 to be 55% of the total population. By definition, children under the age of six were determined to need child care if all adults in the household (including extended family members) were enrolled in school or working, either full-time or part-time.

[2] School District profile (2000) shows the number of students in kindergarten in Tompkins County = 895, New York sate education dept. http://www.emsc.nysed.gov/repcrd2002

[3] Number of families with children under age 6 in school is calculated by the number of children in kindergarten / 1.33 (average number of children <6 per family)
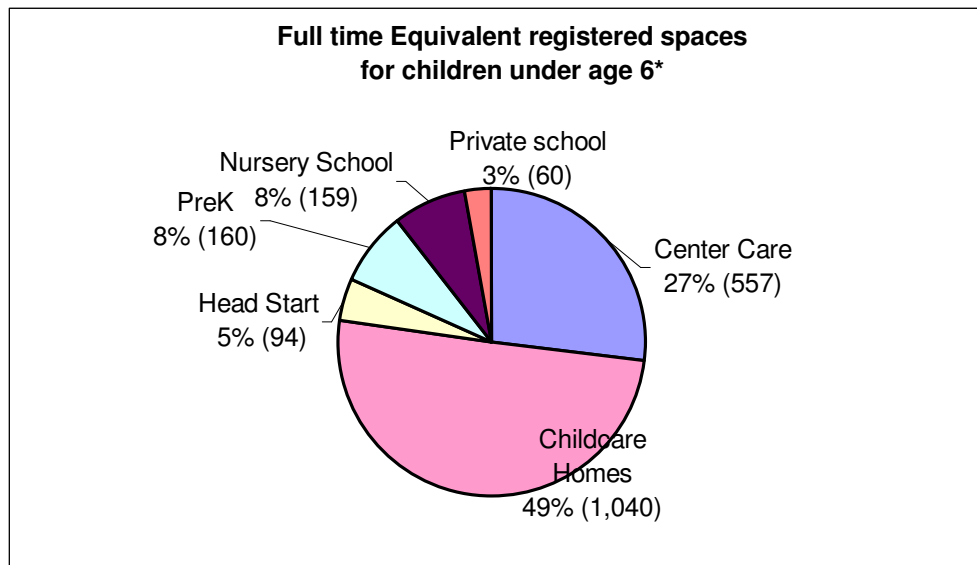
[4] The numbers of children who use part time child care are calculated as 50% of full time space, in order to avoid double count. Child in a part-time care space (Head Start, Pre-kindergarten, Nursery school) may use another type of care as a multiple arrangement.

Child care demand = # of regulated full time spaces / children under age 6 not in school

= 2,070 / 4,372 = 47 %

Table 1. Regulated full-time spaces

Types of Care	*# of regulated full-time spaces in DCC*
Center care	557
Childcare Homes	1,040
Head Start	188 x ½ (part time) = 94
Pre-kindergarten	320 x ½ (part time) = 160
Nursery school	317 x ½ (part time) = 159
Private school	60
Total	**2,070 (47% of children not in school)**

Figure 1. Full -Time Equivalent Regulated Spaces for Children under age 6 (DCC data)

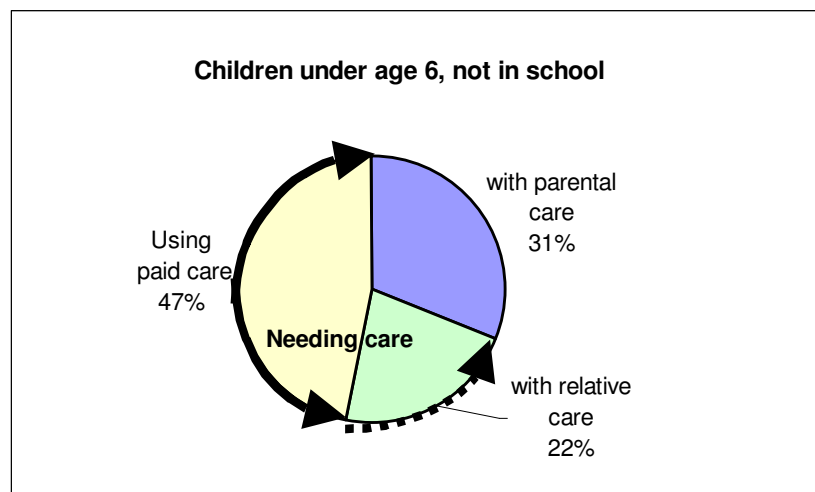**Option 2: Child care demand: 55 % of total children by Kids Count 1994**
Based on the Census 1990, Kids Count 1994 estimated the potential demand for care for children 0-5 to be 55% of the total population. By definition, children under the age of six were determined to need child care if all adults in the household (including extended family members) were enrolled in school or working, either full-time or part-time.

Option 3: Child care demand: Children with non-parental care

National survey[5] shows 31% of children age 5 and younger and not in school have parental care only. Considered all non-parental care as child care demand, we can estimate either 69 % or 47% of children not in school are needing care. Non-parental care includes relative care (22%), regulated care and nanny/babysitters.

Child care demand   = children with non- parental care / children not in school
                          = 3,017 / 4,372
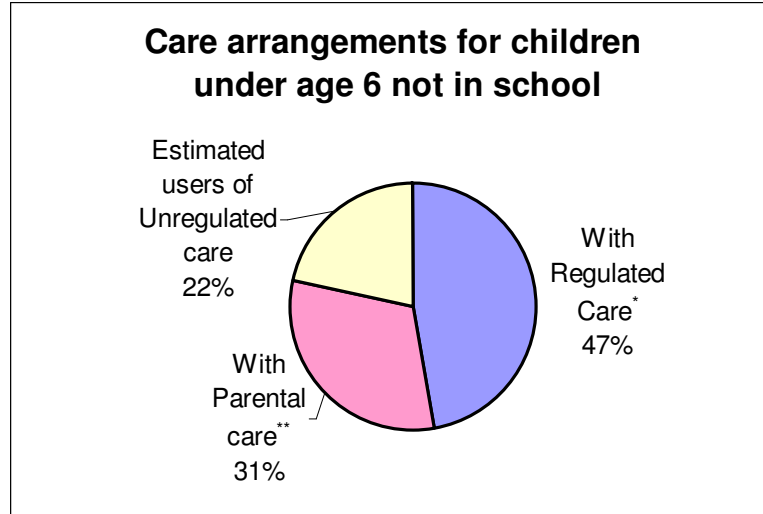   **= 69 % of children not in school**

Figure 2. Parental/ Non-parental care for children not in school

Children under age 6, not in school

with parental care 31%

Using paid care 47%

Needing care

with relative care 22%

Figure 3. Combined methodology of option 1 and 2

**Care arrangements for children
under age 6 not in school**

Estimated users of Unregulated care
22%

With Regulated Care[*]
47%

With Parental care[**]
31%

[*] Children in regulated care spaces are full-time equivalent care spaces based on DCC data.
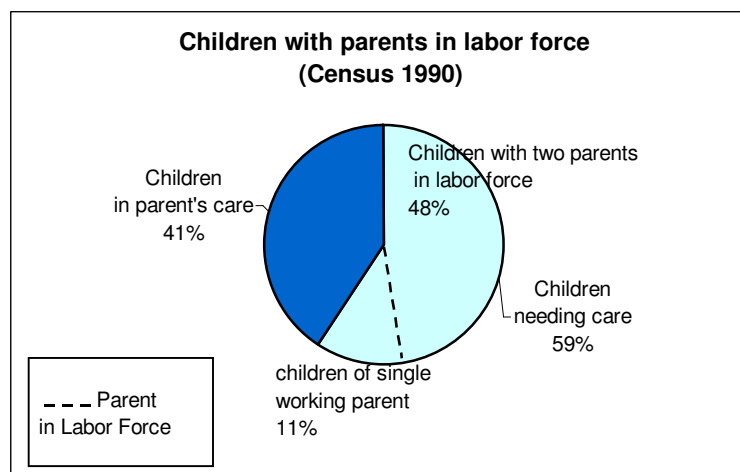[**] The Urban Institute (2000), E*arly Care and Education*. The report shows 31 % of children under age 6 are taken care by parents only.

Combined option 1 and 2 above, all children under age 6 in Tompkins County are assumed to be cared by the following arrangements.

Option 4: Parents in labor force
Using parent's labor force participation, shown in Census 1990, child care demand will be estimated.

Figure 4. Parents labor force participation

**Children with parents in labor force
(Census 1990)**

Children with two parents in labor force
48%

Children in parent's care
41%

Children needing care
59%

children of single working parent
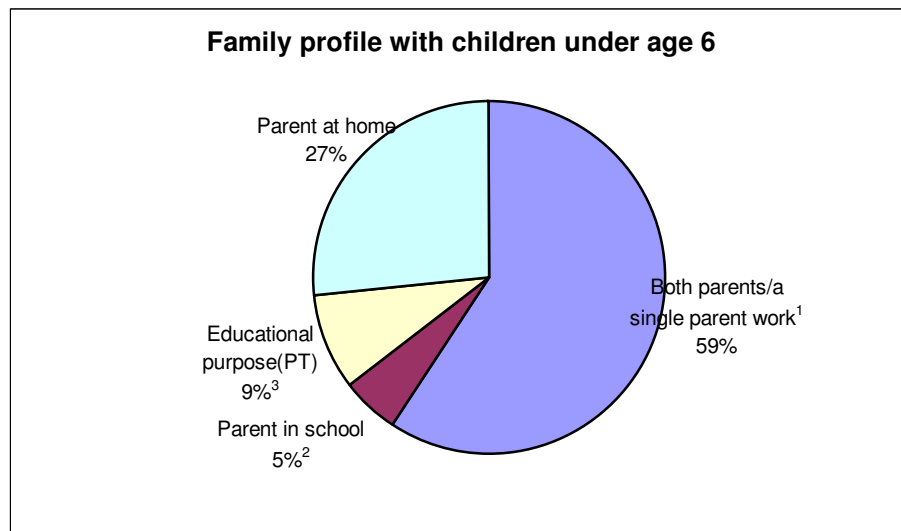11%

– – – Parent in Labor Force

In addition to the parents' labor force participation, preschoolers with a parent who is neither employed nor in school use non parental care for educational development.[***]

Table 2. Children with parents in labor force

	Number of Children under 6
Children under age 6 not in school	4,372
Number of children with parents in labor force (59%) [6]	2,586
Number of Children with parent in school (4.4 %) [7]	232
Children whose parents don't work, but use paid care (43 % of children with non working parents)[8]	384 [9]
Total children needing care	**3,195 (73% of children not in school)**

Figure 5. Family Profile with Children under age 6 not in school

Family profile with children under age 6

Parent at home 27%

Both parents/a single parent work[1] 59%

Educational purpose(PT) 9%[3]

Parent in school 5%[2]

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[6] Based on the Census 1990, 59% of children under age 6 in Tompkins County are either with both parents in labor force or with a single working parent.

[7] Based on US Census report (Who's minding the Kids? 1995), children whose parent in school is around 4.4% of total children.

[8] US Census report (Who's minding the Kids? 1995), shows 43% of parents who are not in labor force use childcare arrangements for enrichment purpose or educational development.

[9] 43 % of children with non-working parents is 767. Since this is likely to be part time care, the number of children is divided by half. (= 384)

This document can be accessed at http://government.cce.cornell.edu/doc/pdf/Child Care Demand Methodology.pdf