

***Economic Analysis of the
Early Care and Education Sector
in New York State***

Cornell University Technical Report

***Prepared for:
New York State Child Care Coordinating Council
New York State Office of Children and Family Services***

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EARLY CARE AND EDUCATION IS AN IMPORTANT ECONOMIC SECTOR

Quality child care has long been recognized as an important social good. Increasingly, states, counties, and municipalities have begun to understand the value of child care to the local economy. To fully understand the economic importance of child care, this report describes traditional child care along with early education programs. The first step in recognizing child care as an economic sector is capturing and describing early care and education in economic terms. This report describes how the number of establishments, capacity, employment, parents served, and gross receipts for early care and education impact the New York State economy.

The child care sector is composed of many small businesses and is an important infrastructure enabling New Yorkers to enter the workforce. While providing quality care for children, early care and education broadens New Yorkers' economic opportunities.

This report focuses on early care and education from an economic development framework. By describing the child care sector and its linkages to the larger economy, this report illustrates how New York State's entire economy benefits from investment in the sector.

Establishments: Over 22,000 small businesses

There are over 22,000 licensed and regulated child care businesses in New York State.¹ Multiple provider types offer parents a great deal of choice for the early care and education of their child. These include private and non profit providers such as child care centers, family child care providers², group family child care providers³, school age child care providers, faith-based providers and nursery schools, as well as public providers. Family child care businesses make up over half of the establishments in New York, as shown in Table 1. The public options for child care include Head Start, Early Head Start and Universal Pre-Kindergarten (UPK). This variety of types of care creates a marketplace of public and private care options, offering many locations for care, some variety in hours of care, differing styles of provision and mixed or single age groups.

¹ Based on the Office of Children and Family Services Licensing Data. A survey underway of the NYS Child Care Resource and Referral agencies suggests that this number is accurate. With 28 counties reporting, all but three report a number of establishments within 10% of the OCFS licensing data. The differences tend to be in family care, where the establishment number varies as providers enter and leave the field.

² Family child care centers can care for a total of 6 children if all children are over two years of age. They can only care for a total of 5 children if they care for infants, and then may have only 2 children under the age of 2. In both cases, they may take two school age children in addition to their licensed total.

³ Group family child care centers are allowed to care for up to 12 children and are not limited in the number of infants they can accommodate. Whenever they care for more than 6 children, there must be an assistant on site and they are required to have one staff person for every 2 infants.

Public early care and education is focused on preparing children for school. The Universal Pre-Kindergarten Program (UPK) is a state funded program that provides free early childhood education for four year olds to assure school-readiness. Statewide there are 3,509 establishments serving 54,150 children. Head Start is a federally funded program that serves children from birth to age 5, pregnant women, and their families. The program operates through Head Start centers and private child care centers; Early Head Start also operates in family homes. Most of the UPK establishments are counted in the standard licensing numbers.⁴ All of the Head Start establishments are licensed and counted within the OCFS data.

Table 1. Establishments by Type: New York State

Licensed and Regulated Child Care Establishments	Number of Establishments
Center Care	3,806
Family Child Care	10,983
Group Family Child Care	3,665
School Age Child Care	2,086
UPK Establishments*	1,682
Total Establishments	22,222

Source: OCFS Licensing Data, 2003; New York State Department of Education

* Not counted among centers above

The total number of establishments above excludes family, friend and neighbor care settings where a provider cares for two children other than her/his own. This informal, legally exempt care is a significant part of the market, although it cannot be counted reliably.⁵

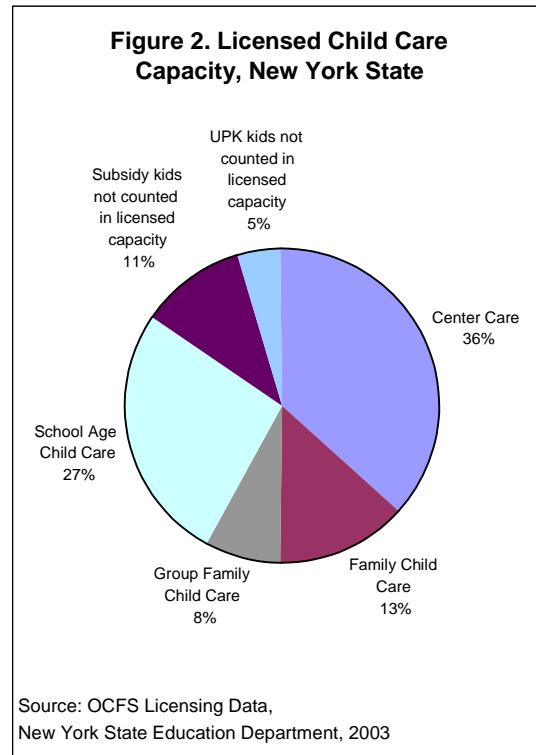
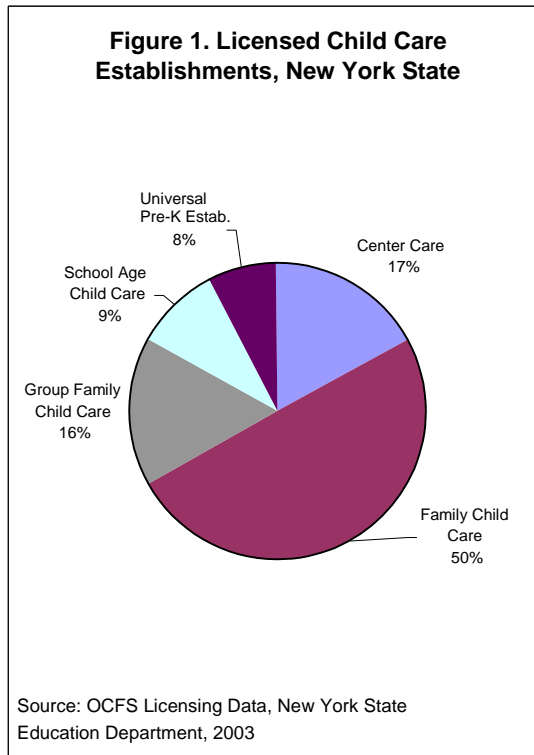
Over 50% of establishments are small businesses in private homes

As shown in Figure 1, 66% of the regulated child care industry in New York is comprised of family and group family child care establishments, for a total of 14,648 establishments (11,000 family homes and 3,648 group family establishments).

⁴ 2,315 UPK establishments are licensed by OCFS, while 1,682 are not.

⁵ The CCR&R survey currently underway suggests that the number of informal and unlicensed establishments can range as high as 70% - 85% of the total number of licensed establishments in the county. Twenty-six of the 33 counties that responded to the survey report some type of unlicensed care including: nursery schools, part-time care, and informal care. The largest numbers of establishments reported are legally exempt family, friend and neighbor care. Based on the US Census Nonemployer data (2001), about 78% of family providers are not licensed in NYS. The Nonemployer data show that there are 49,047 self-employed family providers in New York State who pay taxes as sole business proprietors. However, the New York study only found 10,983 licensed family providers in the state. The difference between these two figures is a rough estimate of the number of unlicensed family providers (38,064) in the state.

The majority of child care establishments are home based, but two thirds of all children are cared for in child care centers (including center care, school age care, and UPK), as shown in Figure 2. This trend makes it challenging to focus quality and safety improvements in one area because the bulk of providers and children are concentrated in different types of establishments.



Workforce: Child care sector employs almost 120,000 New Yorkers

The child care sector employs approximately 119,000 workers in New York State.⁶ This number includes teachers, aides and center directors, as well as administrators, janitors and other support staff.⁷ Of this sum, approximately 55,925 employees work in certified day care centers, 11,015 in family homes, 7,274 in group family homes, and 5,976 work in other UPK settings.

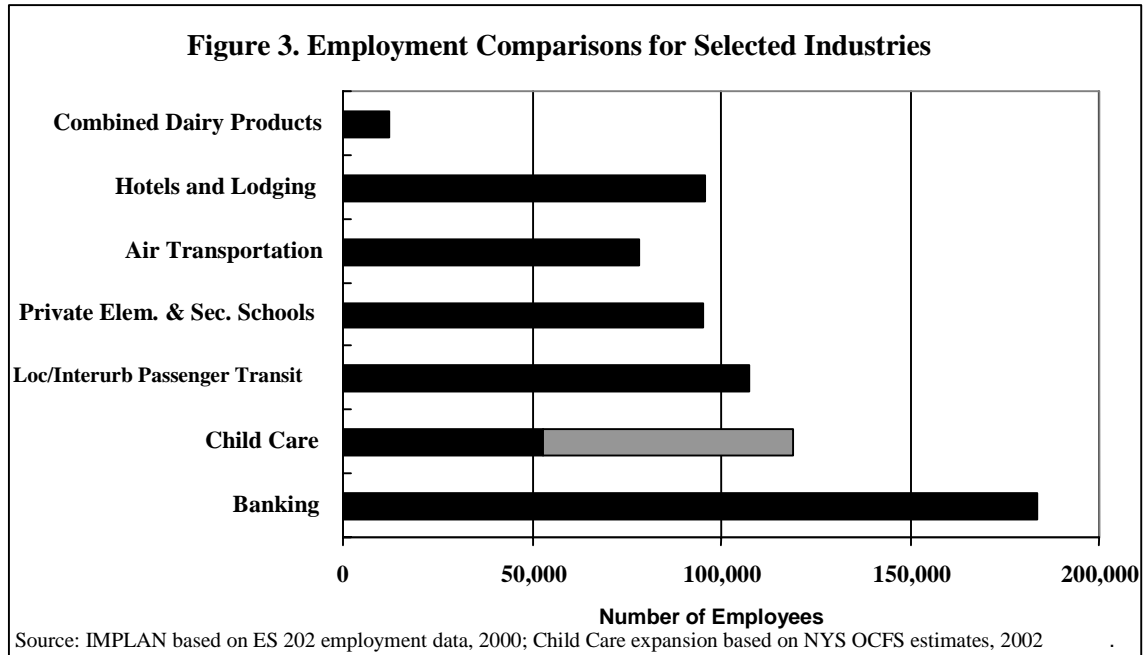
The 1997 Economic Census reports only 67,798 workers in child care. By adding the self-employed, public UPK and Head Start employees and administrative and support staff, the child care industry totals 119,000 workers. The New York State economy totals roughly 10 million jobs, half of which are in Fire, Insurance, and Real Estate (FIRE), and Services.⁸ The child care sector has more employees than infrastructure sectors such as

⁶ Based on estimates from the NYS Office of Children and Family Services (OCFS). See Appendix 3 for a detailed description of how this number was estimated.

⁷ NYS retention data suggest that for every four teachers or direct-contact staff members there is one janitor, cook, or administrator. These ratios come from the distribution of Child Care Professional Retention applications, and are explained in greater detail in Appendix 3.

⁸ US Bureau of Economic Analysis, REIS Table CA-25. <http://www.bea.gov/bea/regional/reis/> 2003.

air transportation and local/interurban passenger transit.⁹ There are more employees in child care than in hotels and lodging, an important tourism sector. Child care employs more than 5 times as many workers as the combined dairy industries, a traditional New York State industry. Child care has two-thirds as many workers as retail banking.



The price of child care is high from the perspective of parents, averaging from \$3,000 for a school aged child to \$9,542 for a young child in a day care center.¹⁰ The low staff-child ratios essential for quality early learning make it difficult for providers to pay salaries high enough to attract and retain highly trained teachers. With an average wage of \$19,480 and limited benefits, child care workers earn a wage comparable to waiters and waitresses. Child care workers wages are roughly 20 percent lower than the average wage for preschool teachers and only one-third the average wage of a kindergarten teacher in New York State.¹¹ Entry level workers earn \$14,530, which only rises to \$22,140 when they become experienced.¹² Some reports indicate these low wages and lack of a career ladder contribute to a turnover rate of more than 30%.¹³

⁹ This number includes fluid milk, 4,139; ice cream and frozen desserts, 1,645; condensed and evaporated milk, 507; natural and processed cheese, 3,625; and dairy farm products, 7,926. IMPLAN 2001.

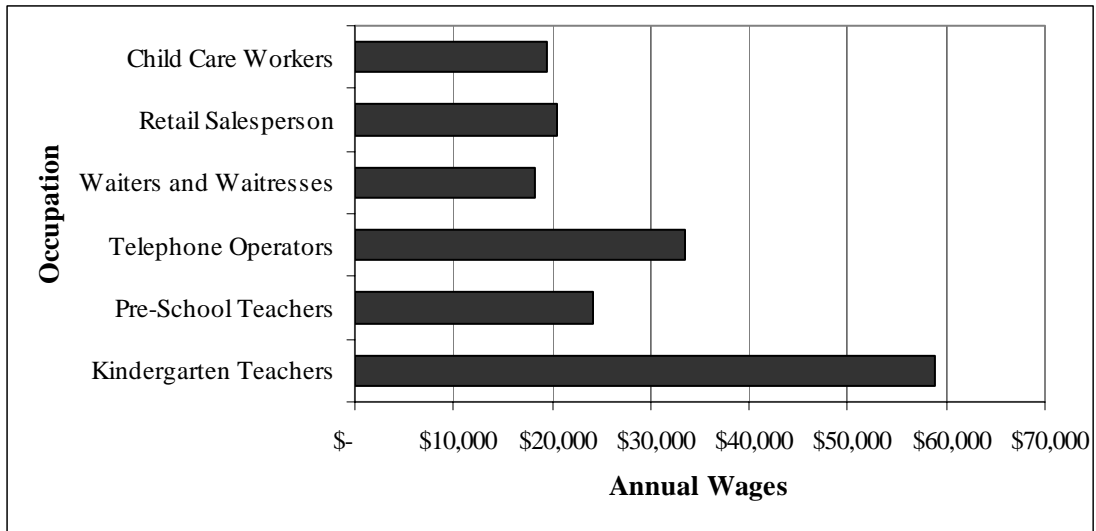
¹⁰ Source: Data was collected from Market Rate Data, OCFS and DOB. See appendix 6 on Gross Receipts methodology for further information.

¹¹ Bureau of Labor Statistics, available at http://www.bls.gov/oes/2001/oes_ny.htm#b41-0000, 11 May 2003.

¹² New York State Department of Labor, "New York State Occupational Employment Statistics Survey," available at <http://64.106.160.140:8080/lmi/oeswage.html>, May 11, 2003.

¹³ Senator Hillary Clinton's office. "Clinton Releases Analysis of Bush Budget and Its Impact on New York," available at <http://clinton.senate.gov/news/2003/02/2003203B53.html>, May 11, 2003.

Figure 4. Wage Comparisons for Selected Occupations in NYS



New York State recognizes the importance of the retention and education of child care teachers. In the past, the Professional Retention Program of the Office of Children and Family Services (OCFS) rewarded employees who remained in their positions for 18 months and/or attained higher education. Data from those who applied for the Professional Retention Program report that 15% of center teachers have Master’s degrees or higher, 16% have undergraduate degrees and 37% have some type of associates degree. Nine percent of family care providers have undergraduate or Master’s degrees.¹⁴

Child care is a growing industry with an emerging career ladder and opportunities for educational development. It is an important source of income to a large number of New Yorkers, many of whom are small business owners. *New York State’s investment in the quality and retention of child care workers helps strengthen the sector.*

New York serves over half a million children

Licensed child care and early education programs in New York serve more than 622,000 children. This includes 526,735 children in licensed child care,¹⁵ 28,259¹⁶ children enrolled in UPK settings not counted within the licensed number, and 67,801¹⁷ additional children who receive subsidies for care by legally exempt providers (that can be counted). Many more children in New York are cared for in unlicensed care. Unlicensed facilities

¹⁴ These statistics may give an overly positive portrayal since this pool is just the fraction of employees (approximately 1/5 of the sector) who applied for the Professional Retention program in 2001.

¹⁵ OCFS-Bureau of Early Childhood Services-Capacity worksheet, March 12, 2003 Albany, NY

¹⁶ New York State Department of Education. Memo from Dee Dwyer dated 12/02/02

¹⁷ ACF-800: Child Care and Development Fund Annual Aggregate Report For Services Provided from October 1, 2001 through September 30, 2002

include friend and relation care¹⁸ and UPK establishments based in public schools and nursery schools, which operate less than 3 hours per day.¹⁹

Table 2. Children Served: New York State

Type of Care	Children Served
Total licensed care	526,735
Subsidy children not counted in licensed capacity	67,801
UPK children not counted in licensed capacity	28,259
Total	622,795

Source: OCFS – Bureau of Early Childhood Services, NYSED, 2003

Children are served by both licensed and unlicensed providers, but this report focuses exclusively on the children in licensed care, UPK and those receiving subsidies in legally exempt care. Thus these estimates are an undercount. The Urban Institute calculates that 24% of children under 5 with employed mothers are in relative care and 25% are in parent care.²⁰ Much of this family, friend and neighbor care is paid but is not counted in the licensing data. The 2000 Census data for New York State shows that there are almost 1.2 million children under age six in New York State whose parents work and an additional 2.2 million children between the ages of 6-13. Many of these children are in paid care but have not been counted in licensing data. Thus, 622,000 is actually a serious undercount of the sector.²¹

Child care enables 750,000 parents to contribute to NYS economy

The child care sector enables parents to go to work and sustain the New York economy. While it is difficult to get an accurate count of exactly how many working parents benefit from child care, NYS Child and Dependent Care Tax Credit claims are a good proxy. *Almost 750,000 parents in New York claimed the credit in 2000 for their child care expenses.*²²

¹⁸ A large proportion of children who are in relative, friend and neighbor care cannot be counted because these providers are not required to be licensed in New York State. However, this study is limited in scope to examine only those portions of the sector that can be counted.

¹⁹ Unlicensed UPK includes establishments classified as: Public and Non Public Schools, Nursery School, No Permit Programs, BOCES programs, and programs listed as Other.

²⁰ Adams, Gina and Kathleen Snyder. Urban Institute calculations from the 1997 National Survey of America's Families, *State Child Care Profile for Children with Employed Mothers: New York*.

²¹ The survey currently underway by the CCR&Rs suggests that this capacity number is low. Twelve of 28 counties (43%) report higher licensed capacity in centers and family/group family care than the OCFS licensing data used for this estimate. In addition to the undercount of licensed capacity, 79% of counties responding to the survey reported nursery schools, 42% reported license-exempt part-time programs, and 55% reported legally exempt providers (that care for no more than two children) in their counties. The capacity of these license-exempt establishments is not included in the 622,000 licensed capacity.

²² Calculated by counting the number of working parents who filed for the tax credit, adjusting for married working parents who filed jointly. In order for parents to file for the NYS Child and Dependent Care Credit both parents must be working with the income of the lower earning parent being larger than their expenditures on child care.

Working parents who depend on child care generate a significant impact on the state economy. The average wage in New York is \$40,658 (in 2000)²³. The 750,000 working parents who utilize paid child care collectively earn an estimated \$30.5 billion, which fuels our state economy through their productivity and consumption.²⁴

750,000 working parents in New York State	X	Average Wages \$40,658 (in 2000\$)	=	Parent Earnings \$30.5 billion
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As New York’s economy grows so will demand for child care

Demographic indicators suggest increasing parental demand for child care services, as more and more parents enter the labor force. In New York State between 1992 and 2002 the female labor force participation rate rose from 58 to 60 percent.²⁵ The percent of children living in single parent families also increased from 28 to 31 percent.²⁶ New York State needs to ensure the availability of flexible and affordable child care to support our growing workforce.

Intermediaries: Making it work for parents and businesses

In any economic sector, intermediaries connect consumers to producers and strengthen industry linkages between producers themselves. Child Care Resource and Referral (CCR&R) agencies play such a role in the child care sector, providing an essential infrastructure system for child care providers and consumers across the state. There are 42 CCR&Rs in New York that have state contracts to facilitate parental access to child care and provide support to child care providers. Most CCR&R agencies are community-based independent non-profits. CCR&R agencies assess community need, develop supply, and help families make informed child care choices. To accomplish these critical tasks, CCR&Rs maintain a comprehensive database that includes information on the availability of child care by type and location within their region.

CCR&Rs also play an important intermediary role for providers. CCR&Rs license providers, enabling them to access state and federal funds for quality and food programs. Many train providers in child development, health and safety, and in business management. They also provide technical assistance and work to increase the supply of child care in their community. Additional funding from local government and private foundations allows CCR&Rs to provide a variety of other intermediary services such as family support and parenting programs, registrar services for counties and “warm” lines

²³ Fiscal Policy Institute, “The State of Working New York” (2001), p30, available at <http://www.fiscalpolicy.org/SOWNY/links.stm>, May 11, 2003.

²⁴ Figures are in 2000 dollars.

²⁵ U.S. Department of Labor, Bureau of Labor Statistics (2003), available at <http://data.bls.gov/cgi-bin/surveymost> May 11, 2003.

²⁶ Kids Count. “Data Book Online,” available at <http://www.aecf.org/cgi-bin/kc2002.cgi?action=profile&area=New+York> May 11, 2003.

to answer parental concerns. CCR&Rs receive a total of \$16.6 million from the state for programming, including \$5.1 million that is passed through to providers. They have 169 employees to run these state-funded programs, and additional staff for other programs. The aggregate budget for CCR&Rs statewide is \$77.6 million, including state and other funding.²⁷ The New York State Child Care Coordinating Council is the umbrella agency that coordinates, strengthens and supports the statewide CCR&R affiliate network.

Estimate of gross receipts

The gross receipts of child care provide a measure of the magnitude of the sector within the regional economy. Gross receipts include an estimate of how much parents pay for child care as well as those portions of the early care and education sector that are government funded. *The child care sector in New York is a \$4.7 billion industry.*

Table 3. Gross Receipts Estimates

Source	Receipts
<u>Private Sector Rest of State</u>	
Centers	\$ 1,052,000,000
Family Care	\$ 303,000,000
Group Family Care	\$ 242,000,000
School Age Care	\$ 207,000,000
Rest of State Subtotal	\$ 1,803,000,000
<u>Private Sector New York City</u>	
Centers	\$ 1,132,000,000
Family Care	\$ 247,000,000
Group Family Care	\$ 136,000,000
School Age Care	\$ 324,000,000
New York City Subtotal	\$ 1,839,000,000
Private Sector Total	\$ 3,642,000,000
Government Sector Total	\$ 1,029,000,000
Total Gross Receipts	\$ 4,671,000,000

Source: Market Rate Survey data, OCFS and DOB, May 2003.

See Appendix 7.

Parents pay most of the cost for child care

The majority of revenues to child care providers come directly from parents. We estimated the private pay portion of gross receipts based on the capacity of licensed child care facilities. Price of care varies by county, age of child and type of provider. Market rate survey data published by the state was used to estimate total receipts from parent charges for each county, and then aggregated to the entire state. The conservative

²⁷ NYS Child Care Coordinating Council (NYSCCCC) asset mapping project. Memo from Ana Winans, NYSCCCC, July 8, 2003.

estimate above shows only the minimum amount of gross receipts in the child care sector because it does not include payments to providers who are not in the licensed system.

The average cost burden on families for child care depends on the age of the child, type of care, and geographic region. New York City families pay an average of \$11,279 each year for full time center care for one child. In the rest of the state, the average price of full-time center care is \$8,185. Family and group family care averages \$6,600 - \$7,600 per year.²⁸

Table 4. Average Cost Estimate for New York State, 2002

	Rest of State	New York City	New York State
Day Care Center	\$ 8,185	\$ 11,279	\$ 9,542
Family Day Care	\$ 6,788	\$ 6,578	\$ 6,692
Group Family Day Care	\$ 7,778	\$ 7,410	\$ 7,641
School Age Child Care	\$ 3,002	\$ 3,284	\$ 3,168

Source: Data was collected from Market Rate Data, OCFS and DOB. See Appendix 7 for further information. May, 2003.

Government pay receipts include investments in quality

Direct government investments in early care and education include Head Start and UPK, direct subsidies to providers to improve quality and to subsidize food, and employee retention subsidies to workers. In all, the state and federal governments contribute \$1.03 billion in direct funding to child care providers. This includes \$420 million for Head Start/Early Head Start, and \$205 million for UPK. Government contributions also include \$128 million for the Child and Adult Care Food Program, \$4.6 million for CUNY/SUNY child care programs, and \$70 million for quality initiatives.²⁹ In addition we have included \$201 million in subsidies paid to unlicensed providers not counted in the private sector.³⁰

The gross receipts of the child care industry total \$4.7 billion. Parent fees are the largest portion, accounting for \$3.6 billion of the total. Direct government investments to improve quality and access add over a billion dollars. This estimate of gross receipts is an undercount because it does not include parent payments to unlicensed care providers.

²⁸ The CCR&R survey currently underway suggests that prices in New York State are slightly lower than the OCFS market rate prices used in this report. For center and family/group family care, the average price tends to be 80%-100% of the market rates. For part-time school age care, the average price is higher than the market rates.

²⁹ Please see Appendix 7 for more information.

³⁰ Subsidies to parents to help cover tuition costs are not included in the government payment section because these subsidies are already reflected in the parent fees. Approximately \$700 million of the \$3.64 billion in private sector receipts is from government subsidies.

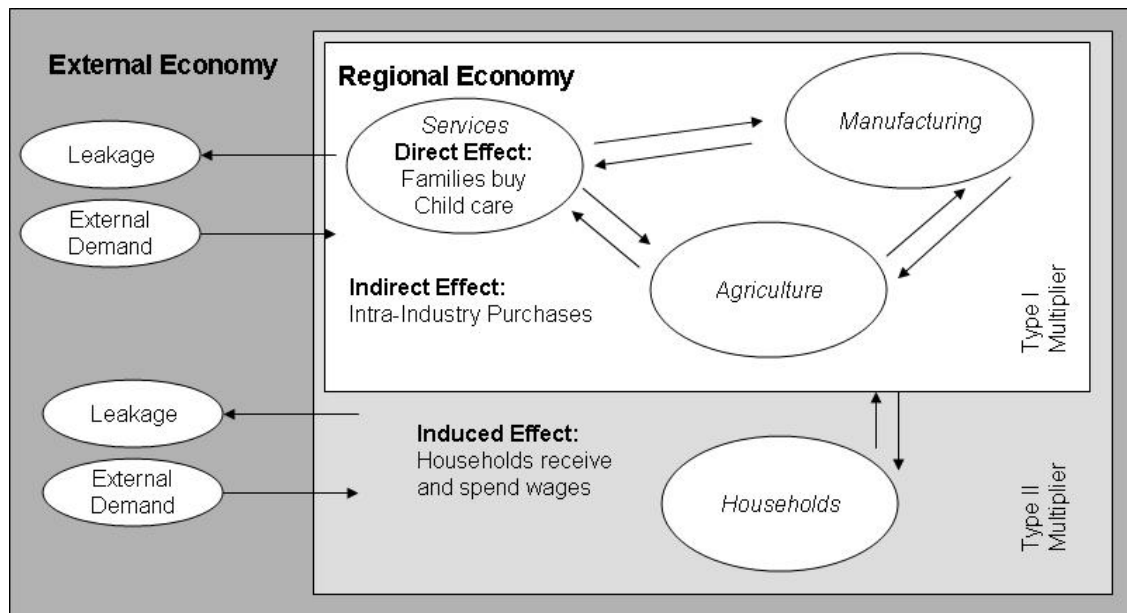
The child care sector is an important economic sector:

- * Child care is a *\$4.7 billion industry* in the State of New York**
- * Child care allows *750,000 parents* to go to work**
- * Parents collectively earn more than *\$30 Billion***
- * There are *22,000 small businesses* in the child care sector**
- * These businesses employ *119,000 workers***

THE CHILD CARE SECTOR'S LINKAGE TO THE BROADER ECONOMY

The child care industry is an important economic sector both through its direct contribution to the New York economy and through linkages to other industries as part of the regional economy. Each industry has its own *direct effect* on the economy through its output and employment. These direct effects for the child care industry are the number of workers and gross receipts. In addition to the direct effects, each industry also has a *linkage effect* on the regional economy. Child care businesses and their employees spend money in New York State to purchase goods and services, producing linkage effects that stimulate economic activity in other industries. The regional economy is composed of many industries that buy and sell from each other. These inter-industry purchases can be measured to show the relative linkage of each industry in the regional economy.

Figure 5. Model of the Regional Economy



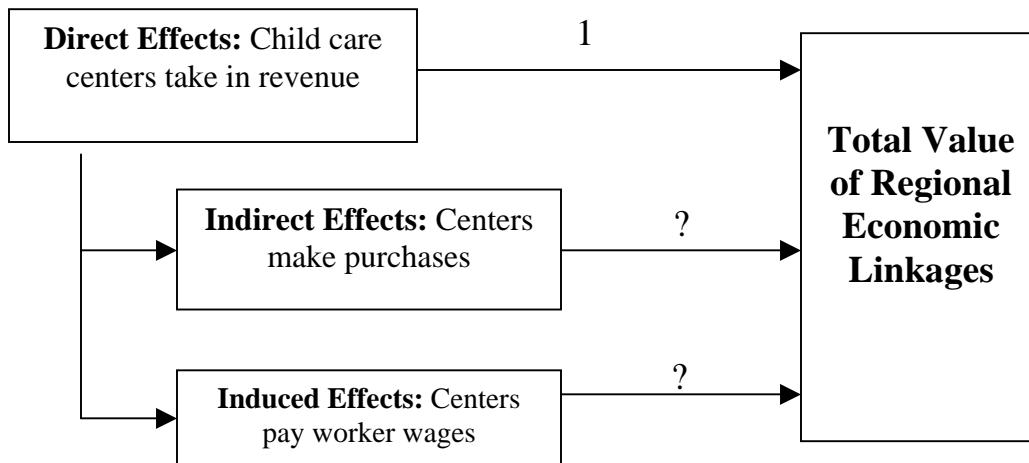
As money circulates between industries in the regional economy it stimulates economic activity. These activities can be considered “ripples” in the regional economy pond. The larger the number of “ripples” before money leaks out of the regional economy through savings or purchases made outside the region, the larger the effect (see Figure 5).

This linkage or “ripple” effect is of two types:

1. *Indirect effects* count the multiple rounds of inter-industry purchases spurred by child care industry spending. For example, when child care providers purchase toys and furniture, they stimulate demand in the retail and manufacturing sectors. The extent to which this demand generates economic activity within New York State increases the linkage effect.

2. *Induced effects* capture the impact of the household sector. Households purchase child care and supply labor to the child care industry. Employees spend their wages in the larger economy. Most of child care workers' earnings are spent locally – on groceries, clothing or housing. These expenditures generate demand in these sectors.

Figure 6. Model of Child Care's Linkage Effects in Economy



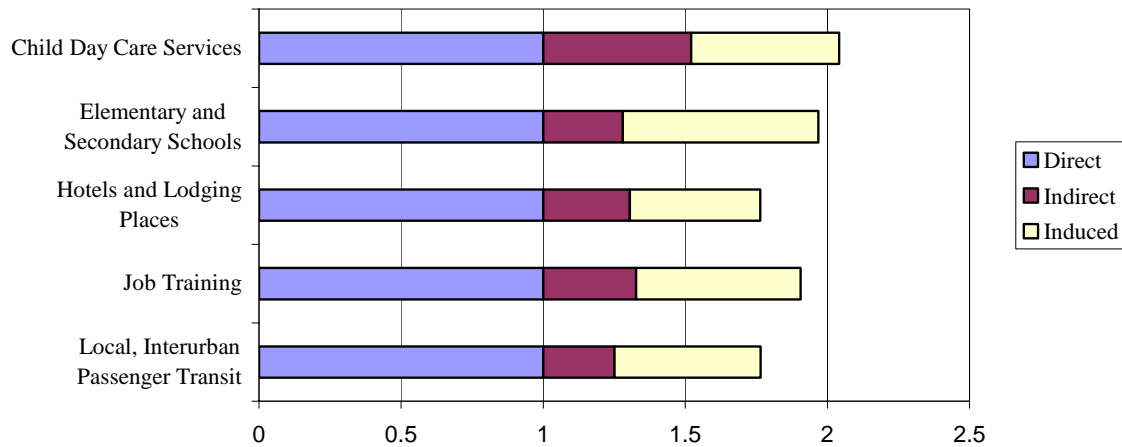
Regional economic modeling known as input-output analysis can be used to measure the linkage effect of any industry. The IMPLAN modeling software used for this analysis includes 540 sectors in the regional models for New York State, including child care. Input-output models are based on the assumption that export demand (or the ability of industries to sell to the external economy) is the engine that generates growth in the regional economy. Export growth infuses local industries with new funds, which they use to increase output and employment. In the case of child care, the only demand that comes from outside the region is federal investment in the state's child care sector. Households are the primary purchasers of child care, and demand is usually local.

Child care's economic linkages are similar to other economic sectors

Input-output models measure the demand from each industry to its suppliers.³¹ The child care sector primarily purchases labor, supplies and food from other sectors. Because most of these purchases are local, child care has a strong linkage effect in the local economy. In fact, child care's multipliers are higher than many sectors which receive significant economic development support (see Figure 7).

³¹ These linkages are called backward linkages. However, the most significant linkages for the child care industry may be its forward linkages, because it enables parents to work – supplying labor to other sectors. To measure the full economic impact of the child care sector both forward and backward linkages should be counted. Cornell researchers are currently working on a model to do this.

Figure 7. Output Multipliers by Industry: New York State



Source: IMPLAN analysis performed by Cornell University using IMPLAN 2000 data. Type I multipliers include direct and indirect effects. Type II multipliers include direct, indirect and induced effects.

Using input-output modeling to assess changes in the regional economy

Input-output modeling is most effective in measuring the impact of a change in the economy. Multipliers help illustrate how a change in child care spending affects the broader regional economy.

For this input-output analysis, we looked at both the employment and output multipliers for the child care sector.

- An output multiplier for the child care industry estimates the total sales that would be generated in the entire economy by each dollar of increased direct spending for child care services.
- The employment multiplier is an estimate of the gross number of jobs that would be created throughout the regional economy from the addition of one new job in the child care industry resulting from an increase in demand for child care services.

Multipliers can measure both industry output and employment at Type I and Type II levels. Type I multipliers count both the direct and indirect effects and count the impacts of inter-industry purchases. Type I multipliers are most appropriate for estimating the economic linkage effects of changes in internal (state or local) demand.

Each additional state or local \$1 spent on child care in New York stimulates a total of \$1.52 in activity in the state economy.

Each additional job created by increased local demand for child care generates a total of 1.26 jobs in the broader state economy.

Type II multipliers include direct, indirect and induced effects (purchases made by the household sector as child care workers spend their wages throughout the economy). Type II multipliers are most appropriate for estimating changes in external demand. In the case of child care, changes in external demand are typically triggered by changes in federal funding.

Each additional federal \$1 spent on child care in New York generates a total of \$2.04 in economic activity throughout the state.

Each additional job created by an increase in external demand for child care generates a total of 1.52 jobs through the state.

Table 5. Child Care Multipliers: New York State

	Direct Effect	Indirect Effect	Induced Effect	Type I Multiplier	Type II Multiplier
Employment	1.00	0.26	0.27	1.26	1.52
Output	1.00	0.52	0.52	1.52	2.04

Source: IMPLAN analysis conducted by Cornell University using IMPLAN 2000 data.

Type I multiplier = (Direct+Indirect)/Direct

Type II Multiplier = (Direct+Indirect+Induced)/Direct

Economists use input-output modeling to measure changes in the economy. Below, we use the findings of our input-output modeling to measure the impact of federal spending on child care (a source of external demand), and the impact of subsidy funding for low income parents on the broader economy.

Government investment ensures quality and choice in the child care market place

By investing in the child care sector, New York State helps ensure the quality of early education and assists in the creation of the child care market. Governmental investments set standards through licensing providers, and provide important training for providers on child development and early education. Furthermore, New York’s retention program supports quality workers and keeps them within the sector.

As it does with higher education, governmental investments also ensure that early care and education is accessible to all children. Subsidies and early education programs such as UPK and Head Start provide parents with the opportunity to access early care and education when otherwise the cost would be prohibitive. This benefits the children who are provided with an early education, and also allows their parents to enter the workforce.

The child care industry received approximately \$1.74 billion in 2002 from the federal, state and local governments, through subsidies, food programs, quality initiatives, and market support. Of this funding, the largest portion (79%) comes directly from the

federal government,³² for a total of \$1.3 Billion, while the State spends about \$306 Million (17%) and local contributions add an additional \$68 Million (4%).³³

Table 6. Summary of New York State Public Child Care Funding, 2002

	Federal Dollars	State Dollars	Local Dollars	Total Dollars
NYS Child Care Block Grant	\$ 331,000,000	\$ 96,000,000	\$ 68,000,000	\$ 495,000,000
TANF Transfers to CCBG	\$ 418,000,000			\$ 418,000,000
Title XX	\$ 68,670,000			\$ 68,670,000
UPK		\$ 205,000,000		\$ 205,000,000
Head Start / Early Head Start	\$ 419,957,000			\$ 419,957,000
CUNY		\$ 2,095,000		\$ 2,095,000
SUNY		\$ 2,533,500		\$ 2,533,500
Child and Adult Care Food Program	\$ 128,646,627			\$ 128,646,627
Total	\$ 1,366,273,627	\$ 305,628,500	\$ 68,000,000	\$ 1,739,902,127

Source: Please see Appendix 6 for detailed sources.

State and local investment builds the quality and licensing system that enables the sector to draw down federal funding. One clear example of this is the Child and Adult Care Food Program (CACFP), which provides nutritious food for children in registered child care settings. This federal program spent approximately \$129 million in the state of New York in fiscal year 2002. These federal dollars would not have been invested in New York if the State did not register child care facilities. New York provides the matching and maintenance of effort funds required to draw down our full federal Child Care Block Grant allotment, plus extra funding if there is surplus from other states. These federal funds would be lost from our economy if New York State did not allocate state funds to the child care sector. Overall, our estimates show that New York State leverages roughly \$3.66 federal dollars for each dollar of state and local expenditure.

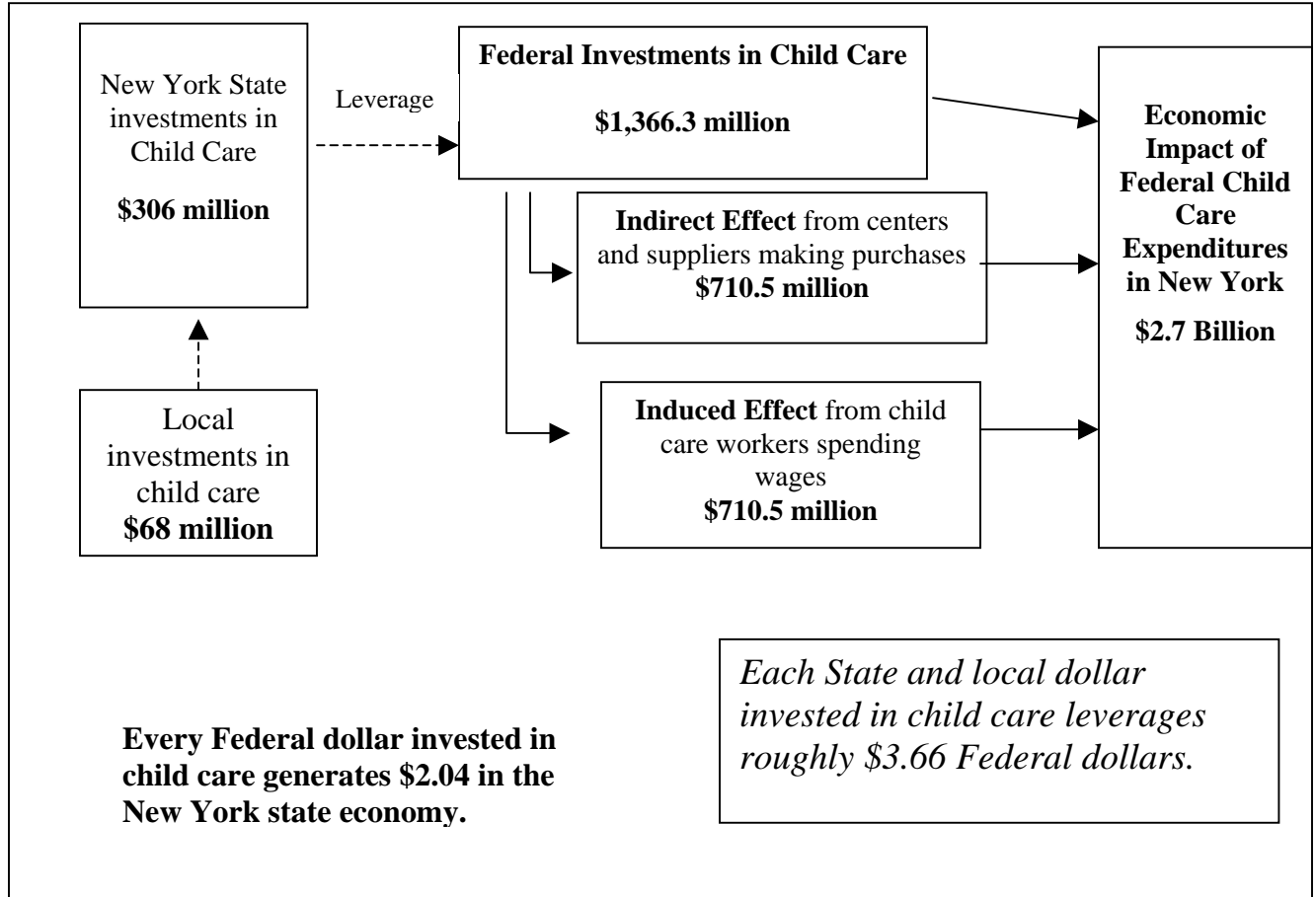
Growth in the regional economy is driven by external demand. In the child care sector, where most of the demand is local – from households - federal investments represent the most important source of external demand. External demand spurs economic development by bringing in additional dollars to the state economy. We can use the Type II multipliers from the input-output analysis to determine the linkage effect of these federal dollars. We find that each federal dollar generates a total linkage in the broader NYS economy of \$2.04 for a total impact of \$2.8 billion on the regional economy. This

³² See Appendix 6 for breakdown on government funding streams.

³³ This number includes the matching and maintenance of effort funding provided by localities. It does not include local investment in child care over and above the match and maintenance of effort funds, such as significant investment by New York City.

linkage effect, combined with the leverage effect described above, creates a combined impact of more than \$7.00³⁴ for every dollar the state invests in the child care sector.

Figure 8. Child Care is an Economic Investment



Source: Based on OCFS data for 2002 and IMPLAN indirect and induced multiplier analysis by Cornell University (2000 data)

Subsidies make work pay

Quality child care is expensive from the perspective of parents – especially parents in low wage employment. Since welfare reform in 1996, the federal and state governments’ commitment to child care subsidies has grown over 225% to enable parents to enter the workforce.³⁵ The program provides direct subsidies to pay for child care to low-income working parents and to families on or transitioning off public assistance. New York State allocated \$981.7 million for child care subsidies in FY 2002 – and served 183,400

³⁴ \$3.66 in leverage * \$2.04 in linkage = \$7.47

³⁵ Governor’s Executive Budget (2003) p.95, available at <http://www.budget.state.ny.us/pubs/executive/fy0304littlebook/Overview0304.pdf> Accessed May 11, 2003.

children.³⁶ The main funding stream of the program is the New York State Child Care Block Grant (CCBG). Many social services districts supplement CCBG funds with the federal social services block grant Title XX and transfers from Temporary Aid to Needy Families (TANF).³⁷ For FY2002, the allocated New York State Child Care Block Grant totaled \$913 million.³⁸ For FY2002, Title XX allocated funds totaled \$68.7 million. Parents are eligible to receive subsidies via licensed, registered and legally exempt child care providers. New York families qualify for subsidies on a sliding scale based on income, ranging from 140% - 275% of the federal poverty level. Families on or transitioning off public assistance receive full subsidies, and all other families pay a family share co-pay.³⁹

The Office of Child and Family Services (OCFS) estimates there are an average of 1.5 children in each of the 116,752 families receiving subsidies, and that 1 of 9 families have two parents. Thus there are approximately 130,000 working parents that benefit from the subsidy system.⁴⁰ The wage of a low-wage worker in 2001 (defined as a worker at the 20th percentile) was \$8.07/hr or almost \$13,275/yr (assuming a 35 hour work week for 47 weeks).⁴¹ We estimate that subsidies enable 130,000 parents to collectively earn \$1.7 billion.

130,000 parents receive subsidies	X	\$13,275 annual wage	=	\$1.7 billion parent wages
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According to the 1999 National Survey of America’s Families, only 25% of low-income working families in New York State receive government subsidies for their child care expenses.⁴² While New York State is serving more low-income working families than the country as a whole (25% compared to 21% for the nation), the fact that only 1 in 4 low income working families are served suggests that more outreach needs to occur. If

³⁶ Governor’s Executive Budget (2003) p. 97, available at <http://www.budget.state.ny.us/pubs/executive/fy0304littlebook/Overview0304.pdf> Accessed May 11, 2003.

³⁷ For the most comprehensive analysis of New York State’s subsidy program, on which this section is based, see Rolnick, Wendy Goodale and Susan Antos (Eds) (2002). “Child Care in New York State: A Patchwork of Policies: A County-by-County Review of Subsidy Administration.” Greater Upstate Law Project: Albany, p1.

³⁸ Governor’s Executive Budget Overview (2003), available at <http://www.budget.state.ny.us/pubs/executive/fy0304littlebook/Overview0304.pdf> Accessed May 11, 2003.

³⁹ Rolnick, Wendy Goodale and Susan Antos (Eds) (2002). “Child Care in New York State: A Patchwork of Policies: A county-by-county review of subsidy administration.” Greater Upstate Law Project: Albany, p23. See Table 12 of the report for the county breakdowns.

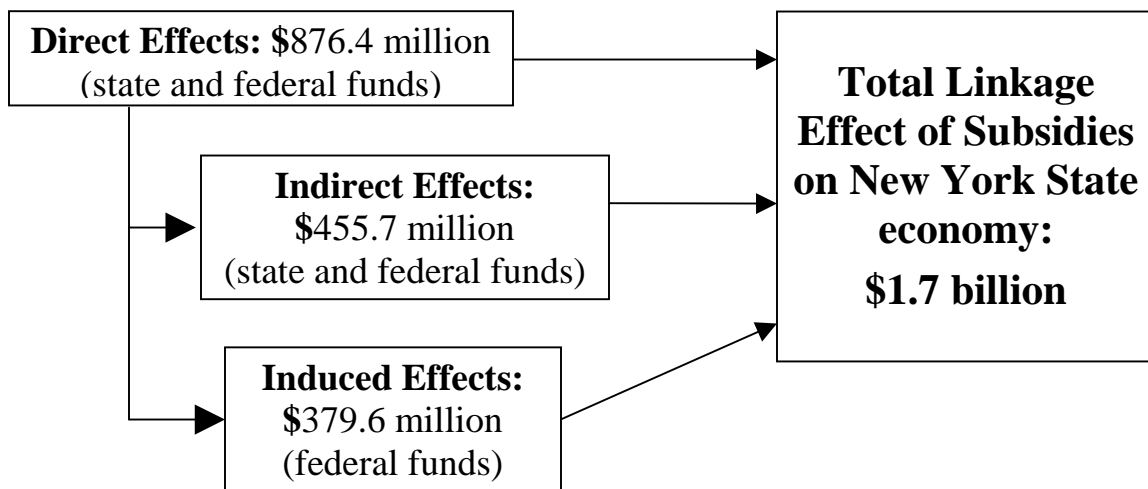
⁴⁰ This was calculated using the number of families receiving subsidies in New York State and adjusted for number of children and parents (see Appendix 5).

⁴¹ Economic Policy Institute (2002). “State of Working America.” The average weekly hours of an employee in the Retail Trade sector is 35 hours (p240). The wage of a worker at the 20th percentile is \$8.07 in 2001\$ (at the 10th percentile it is \$6.69) (p128). In 2000 the average number of weeks worked of an employee was 47 (p117).

⁴² Urban Institute, “Child Care Expenses and Getting Help with Child Care in New York,” available at http://www.urban.org/pdfs/310615_OP62_NY_Data.pdf Accessed May 11, 2003.

New York State were to serve all eligible low-income working families, the estimated impact, measured by parents' earnings, would be nearly seven billion dollars.⁴³ The money that New York State currently spends on subsidizing child care for working parents also has a positive ripple effect throughout the economy. We can use the Type I multiplier from our input-output analysis to determine that when New York State spends roughly \$876.4 million on subsidizing child care,⁴⁴ it stimulates an additional \$455.7 million of gross receipts in other industries by stimulating consumption for goods and services (see the model in Figure 6). The federal portion of this spending, which comes from outside the state economy, stimulates a further \$380 million in household and industry spending, for a total economic impact of child care subsidies of \$1.7 billion (Figure 9).⁴⁵

Figure 9. Effect of Subsidies on New York State Economy



Source: IMPLAN multiplier based on NYS 2000 data calculated by Cornell University, Subsidy expenditure data from Office of Children and Family Services 2002.

⁴³ \$1.7 billion in parental wages x 4 = \$6.8 billion as only 25% are being served.

⁴⁴ The discrepancy between the \$981.7 million in subsidy funding published in the Governor's Executive Budget and the \$876.4 million in subsidy funding published by the NYS Office of Children and Family Services (OCFS) is due to the fact that the data published in the Executive Budget is *allocation* data whereas the data published by OCFS is the actual amount *claimed* by counties.

⁴⁵ Roughly 4/5 of the total subsidy spending in 2002 was federal funding. For this analysis, indirect effects (Type I multiplier) were calculated for all funds (local, state and federal), while induced effects (part of the Type II multiplier) were calculated on the federal funds only.

CHILD CARE IS AN IMPORTANT ECONOMIC DEVELOPMENT STRATEGY

Broadly defined, economic development should create quality jobs, raise living standards, and provide a sustainable return on investment. With over 22,000 small businesses, 119,000 workers, 750,000 parents and \$4.7 billion in gross receipts, early care and education is an essential component of New York State's economic development infrastructure. Bringing the historically overlooked child care industry into an economic development framework will benefit the entire regional economy.

Investments in child care support New York State businesses by enabling parents to work

Child care enables parents in New York State to enter the labor force and meet the demands of today's fast-paced economy. Strategic industries for economic development in New York require a business-friendly infrastructure that is also friendly to workers. In order to stay competitive New York State needs to harness the human capital of its residents to attract high-paying industries targeted by the New York State Economic Development Council such as Biotechnology and Pharmaceuticals, Electronics Manufacturing and Medical Technology.⁴⁶ Child care facilitates parents' flexibility and increased productivity⁴⁷ while promoting early childhood development for New York's next generation of business owners and employees.

Small businesses in New York State face a difficult position in competing with larger companies while providing much needed employment for New York workers. As Governor Pataki states, "small businesses are the bedrock of the small-town economy and the growth engine of the new economy".⁴⁸ For small business to thrive, whether in upstate New York or in the New York City metro area, New York State needs to ensure the adequate provision of quality child care for working families.

Given the structure of New York State's economy, affordable high-quality child care is an essential component of strengthening our economic base. Moderately high paying industries such as construction and manufacturing represent only a fraction of the state economy. The two largest industries – retail trade and services – collectively account for over 60% of private-sector jobs in New York State (Table 7). Between 1992 and 2000, nine of the top 15 fastest growing industries in New York were in the service sector, many of them paying significantly less than the state's average wage of \$40,658. Growth in these service industries represented over 30% of the total state job growth 1992 -

⁴⁶ See the New York State Economic Development Council's Strategic Industry Profiles for more information on how these industries relate to New York's Economic Growth at <http://www.nysecd.org/profiles/index.shtml> May 11, 2003

⁴⁷ U.S. Child Care Bureau, "It's Good Business to Invest in Child Care," available at <http://www.nccic.org/ccpartnerships/toolkit/pdf/section1.pdf> May 11, 2003.

⁴⁸ New York Loves Small Business, "Welcome from Governor George Pataki," available at http://www.nylovesmallbiz.com/message_governor.asp May 11, 2003.

2000.⁴⁹ At the same time, efforts to attract good, high paying jobs also require a quality child care infrastructure.

Table 7. New York State Private Nonfarm Employment, 2000

Industry	No. of Jobs	%
Ag. services, forestry, fishing and other	74,855	0.8%
Mining	9,087	0.1%
Construction	458,918	5.1%
Manufacturing	903,843	10.0%
Transportation and public utilities	520,988	5.8%
Wholesale trade	481,763	5.3%
Retail trade	1,480,740	16.4%
Finance, insurance, and real estate	1,142,706	12.7%
Services	3,932,496	43.7%
Total	9,005,396	100.0%

Source: US BEA, REIS Table CA-25 <http://www.bea.gov/bea/regional/reis/>, 2003.

Subsidies make work pay

Child care subsidies to parents represent a vital support to promote business and employment growth in New York State. Across the country, 65 - 80% of parents receiving subsidies work in either retail trade or in services, so subsidies support these growing sectors in particular.⁵⁰ A subsidy to a working parent allows the parent to be present at work because he/she can leave the child in reliable care. Employers must be educated to recognize the importance of these subsidies so they can advocate for expanding their utilization. The Tompkins County Chamber of Commerce's Early Education Partnership is conducting an outreach campaign to encourage area employers to advertise subsidies to their eligible employees.⁵¹ As noted earlier, New York currently serves only 25% of eligible children.

Subsidy programs can also be fashioned so that employers match government funds in order to ensure child care for their employees. Florida did this through its Child Care Partnership Act and has succeeded in attracting \$19 million in private sector support for subsidies to low income employees.⁵² Subsidies pay for themselves by fueling growth industries. However, they need to be expanded to serve all eligible working families.

⁴⁹ Fiscal Policy Institute, "The State of Working New York" (2001), p30, available at <http://www.fiscalpolicy.org/SOWNY/links.stm> Accessed May 11, 2003.

⁵⁰ Okuyama, Kumiko and Roberta Weber. "Parents Receiving Child Care Subsidies: Where Do They Work?". Oregon Child Care Research Partnership: October, 2001.

⁵¹ Tompkins County Early Education Partnership, "Fill the Gap: Child Care Supports Workers and Employers" (2002), available at <http://www.cce.cornell.edu/restructuring/doc/html/Filling%20the%20subsidy%20gap.htm> May 11, 2003.

⁵² Anne Mitchell et al., "Financing Child Care in the United States: An Expanded Catalog of Current Strategies" (2001), available at www.emkf.org/youth_development/childcare2001/index.cfm Accessed May 11, 2003.

Early care and education is a fundamental component in attracting industries to diversify and increase the number of good jobs for working families. By promoting professional child care providers, we can ensure a pro-growth and pro-business climate to foster the development of good jobs for New York State. As Joseph M. Tucci, Chairman of the Business Round Table's Education and Workforce Task Force and President/ CEO of EMC Corporation states:⁵³

“The business community supports high-quality early childhood education programs because they lead to improved education results, a world-class work force, a healthier society, and ultimately a stronger economy.”

New York leads nation in child care tax relief

For many New York families, child care costs equal their cost of housing. State tax relief for working families that depend on child care is a fundamental component of New York's social infrastructure for economic development. New York State ranks first in the country in providing Child and Dependent Care tax relief for working families.⁵⁴ Building on this strong foundation can enable child care policies in New York State to remain a model for the rest of the nation.

New York State provides financial assistance for working families through the refundable Child and Dependent Care Tax Credit (CDCC). Almost 750,000 working New York parents claimed the credit in 2000; however, the average credit received was only \$270 per parent. This is much lower than the \$1,440 credit that a family with two dependents potentially is eligible to claim,⁵⁵ highlighting the fact that low-income families are not utilizing the tax credit enough.⁵⁶ Parents also can receive federal tax relief through the non-refundable Federal Child and Dependent Care Credit, with an average return at \$490 dollars per claim.⁵⁷

New York State revamped the CDCC by increasing the income eligibility criteria and increasing the value of the credit by allowing taxpayers to claim 110% of the federal

⁵³ The Business Roundtable and Corporate Voices for Working Families. (May 7th, 2003) “Business Leaders Warn of Early Learning Gap; Urge States, Federal Government to Build High-Quality Early Childhood Education Programs.”

⁵⁴ National Women's Law Center “Making the Grade for Care: Ranking State Child and Dependent Care Tax Provisions” (2002), available at <http://www.nwlc.org/pdf/MakingTheGradeForCare2002.pdf> Accessed May 11, 2003.

⁵⁵ Tompkins County Early Education Partnership, “The Child Care Tax Credit: Too Little, Too Late,” available at <http://www.cce.cornell.edu/restructuring/doc/html/Tax%20credit%20problems.htm> Accessed May 11, 2003.

⁵⁶ The average tax claimed per parent is \$270. Single and head of household filers claim an average of \$580 while married couples filing jointly claim an average of \$390 per claim. Source: New York Office of Tax Policy Analysis (Nicholas_Gugie@tax.state.ny.us), April 2003.

⁵⁷ IRS data from memo from Russell Sykes, Schuyler Center, April 2003.

credit, up from 20% four years ago. New York also made the state credit refundable.⁵⁸ These reforms have greatly enhanced the tax credits claimed across the state, as shown in Table 8 below by the growing total tax credit granted by the state. However, the low average claim suggests that outreach is needed to encourage more low-income families to expand their usage of the program.

Table 8. New York State Personal Income Tax Credit (millions of dollars)

	1995	1996	1997	1998	1999	2002
Child and Dependent Care Credit	39.1	35.5	40.1	76.8	139.4	201

Source: NYS Division of the Budget 2003 Tax Expenditure Report
<http://www.budget.state.ny.us/pubs/supporting/TaxExpendReport0304.pdf> (p13).

The business community helps families address the cost of child care

Businesses can create Flexible Spending Accounts (FSAs) where employees can place up to \$5,000 of their earnings in a pre-tax account. Employees withdraw the money by submitting receipts for child care services.⁵⁹

FSAs reward both workers and employers for investing in child care.

Since FSAs are non-taxable, the result is a significant tax savings for the worker. On average, this amounts to between \$1,000 and \$2,500 in tax savings for workers.⁶⁰ All money placed into a

FSA is exempt from Social Security, Medicaid and other federal payroll taxes, resulting in a significant tax savings for employers as well.⁶¹

Challenges with the current FSA

The maximum yearly contribution of \$5,000 has not been raised since the inception of the FSA program in 1983. The current average price of full-time child care is \$6,600 - \$11,000 per year for one child in NYS, and many families have two children in care. Since this is a federal program, the business community could play a critical role in pointing out the economic benefit of increasing the maximum level to reflect the actual costs of care.

⁵⁸ Fiscal Policy Institute, “The Impact of New York State’s Personal Income Tax on Low Income Working Families” (2001), available at <http://www.fiscalpolicy.org/incometaxthresholds02.PDF> . Accessed May 11, 2003.

⁵⁹ Early Education Partnership in Tompkins County, “Flexible Spending Accounts for Dependent Care,” available at <http://www.cce.cornell.edu/restructuring/doc/pdf/FSA%20employer%20info.pdf> Accessed May 11, 2003.

⁶⁰ Early Education Partnership in Tompkins County, “Flexible Spending Accounts for Dependent Care,” available at <http://www.cce.cornell.edu/restructuring/doc/pdf/FSA%20employer%20info.pdf> Accessed May 11, 2003.

⁶¹ National Women’s Law Center. “Credit Where Credit is Due,” available at <http://www.nwlc.org/pdf/CreditWhereCreditIsDue.pdf> Accessed May 11, 2003.

Many employees hesitate to use the program because it operates by reimbursement and any money left in the account at year end is forfeit, resulting in only 2-4% of workers participating in the program when offered.⁶² To make the program more attractive, New York State starts its employees' plan year in February so employees have reimbursable expenses as soon as funds are withdrawn from their paychecks. The State also contributes \$200-\$600 to employees' FSAs.⁶³ Tompkins County's largest employer, Cornell University, utilizes FSAs to contribute up to \$5,000 per year toward child care expenses for low-income employees. Cornell, like many Fortune 500 companies, recognizes the importance of early education for its current and future workforce.

Investment in quality early care and education benefits all of us

What a child learns early in life affects brain development and learning potential in the future. Skills that develop early (ages 0-5) in a child's life are: patterns of interpersonal and moral development, pro-social and antisocial behavior, empathy, self-confidence, and a sense of responsibility for oneself and others. Investing in kids now will benefit society later by creating a better-educated and more productive workforce, ensuring that more people are able to care for themselves without government support, and reducing crime and expenditures on prisons and law enforcement.⁶⁴

“Kids are the raw material from which society is made.”
-Lakoff and Grady

Quality matters

Improvements in the quality of care require an investment beyond that which can be expected from parent fees. New York State works to ensure high quality care by having stringent teacher-child ratios, which raises the cost of care. However, public investment in early care and education is much lower than public investment in K-12 and higher education. National estimates show that tuition charges cover only 35% of the cost of college on average, but nearly 90% of the cost of early education.⁶⁵

The Committee for Economic Development believes that

it is time for the United States to acknowledge society's stake in and responsibility for early education...by making publicly funded prekindergarten, offered by a variety of providers, available to all children⁶⁶

⁶² Early Education Partnership in Tompkins County, “Flexible Spending Accounts for Dependent Care,” available at <http://www.cce.cornell.edu/restructuring/doc/pdf/FSA%20employer%20info.pdf> Accessed May 11, 2003.

⁶³ New York State, Flexible Spending Account Department, Dependent Care Advantage Account, 2002 Change in Status Form. The match amount varies by employee salary.

⁶⁴ Lakoff, George and Joseph Grady (1998). “Why Early Ed Benefits All of Us.” *Effective Language for Discussing Early Childhood Education and Policy*. Washington, DC: The Benton Foundation.

⁶⁵ Mitchell, Anne, Louise Stoney, Harriet Dichter (2001). “Financing Child Care in the United States: An Expanded Catalog of Current Strategies”

⁶⁶ “Preschool For All: Investing in a Productive and Just Society” available at www.ced.org/docs/summary.PDF Accessed May 11, 2003.

Quality child care builds quality people, and high tech and creative industries look to locate in communities with high quality of life. “What attracts a business to a community has less to do with low taxes and cheap land, and much more to do with the presence of talented people,” says Richard Florida of Carnegie Mellon University.⁶⁷ In Rochester, NY a coalition of business, education, and non-profit organizations created the Early Childhood Development Initiative to increase public and private investment and community responsibility for early care and education.⁶⁸

Costs and Benefits

This report highlights the short-term effects of early care and education on the regional NYS economy. Long-term benefits to society and the economy are equally important, if not more so. Economists Rolnick and Grunewald of the Federal Reserve have investigated the long-term return of investments in early care and education.⁶⁹

“Early childhood development is rarely portrayed as economic development and we think that is a mistake... well focused investments in early childhood development yield high public as well as private returns.” –Rolnick and Grunewald

The report suggests that early childhood development is underfunded; higher funding would lead to an even higher internal rate of return. Although providing quality early care and education for children can be expensive, the returns to society through reductions in social problems and costs over time will offset the investment.

Thinking of child care as a business

Support small businesses

The child care sector is composed of small businesses that would benefit from policies to promote entrepreneurship, improve business management, and develop economies of scale. Access to economic development incentives geared to small businesses would assist child care providers with upgrading facilities and reducing operating costs. These incentives also might help reduce the high turnover rate for these establishments. Child care employees might benefit from policies aimed at improving wages and benefits. For

**“Small businesses are the bedrock of the small-town economy and the growth engine of the new economy”
- Governor George Pataki**

⁶⁷ “Top Quality Of Life A Magnet For Business” available at

http://www.heinz.cmu.edu/~florida/pages/new_economy/top_quality.htm Accessed May 11, 2003.

⁶⁸ “Financing Childcare in the United States: An Illustrative Catalog of Current Strategies”. Pew Charitable Trusts: 1997. Available at <http://www.nccic.org/pubs/financing-cc/>. Accessed May 11, 2003.

⁶⁹ Art Rolnick and Rob Grunewald, (2003) “Early Childhood Development: Economic Development with a High Public Return,” available at <http://minneapolisfed.org/pubs/fedgaz/03-03/earlychild.pdf> Accessed May 10, 2003.

example, the reduction of Healthy New York premiums for child care employees could increase their access to health care.

Improve general business management skills

Motivated primarily by their interests in child development and education, child care providers miss opportunities to reduce costs and improve efficiency. Currently, CCR&Rs are valuable intermediaries in the areas of early care and licensing. They provide important technical assistance in the areas of program design, referrals, insurance, budgeting, record keeping, zoning, and navigation of state programs. CCR&Rs are well positioned to disseminate successful business practices.

To improve small business management resources, CCR&Rs can develop relationships with local community development corporations (CDCs), business groups and New York State's Small Business Development Centers (SBDCs). The SUNY Stony Brook SBDC worked with the Institute for Entrepreneurship to develop business planning software for child care providers.⁷⁰ Partnerships with the NYS Department of Economic Development and US Small Business Administration might assist CCR&Rs in forging relationships with groups experienced in general business management, employment training, and community organizing. Ultimately, this will help CCR&Rs develop new ways to leverage their knowledge of the child care sector and spread best practices.

Develop support structures that enable economies of scale

Developing economies of scale would reduce the overhead of running individual child care establishments. While maintaining the diversity of providers and parent choice in the market, there are mechanisms used in other industries – such as the travel industry - to streamline billing, marketing, and purchasing and reduce overhead. Adapting such systems to the child care sector would enable providers to spend less time on back-office tasks and more time delivering quality care, reducing administrative costs and improving cash flow.⁷¹ The CCR&Rs would be crucial partners with providers in such an effort.

Utilize existing economic development strategies

Tax abatements

Traditional economic development policies and programs can be applied to child care. Tax abatements reduce a firm's taxes as motivation for locating or staying in the area. When tied to child care, tax abatements can be designated to reduce child care expenditures. Austin, Texas, has recently earmarked 20% of a tax abatement package for work force development and child care.⁷² By including child care as an up front

⁷⁰ Wesnofske, Lucille (2000). "Building Blocks Child Care Business Planner." The Institute for Entrepreneurship.

⁷¹ Stoney, Louise, (2003) "Visioning A New Child Care Financing Structure," available at <http://smartnet.smartstart-nc.org/national/financing/economiesbrief.doc> Accessed May 11, 2003.

⁷² National Child Care Information Center., "Tax Credits, Deductions and Exemptions," available at <http://www.nccic.org/pubs/financing-cc/child018.html> Accessed May 11, 2003.

provision, employers understand that their tax reduction pays a double benefit in the care infrastructure it helps develop.

Tax credits

Credits for business encourage development of onsite facilities or reward programs that subsidize employee child care. Tax credits targeted at child care employees can supplement wages and provide an incentive for child care employees to remain in the field. Improving wages and reducing turnover are important child care objectives that economic development policy can address. In general, tax credits are strongest when they are universal and do not require annual budget deliberations.

Conclusion

This study has shown that early learning has positive short term benefits for the New York State economy. The sector includes more than 22,000 small businesses that employ 119,000 workers. It serves more than 750,000 working parents and generates \$4.7 billion in gross receipts. But this is only the beginning. Our regional economic analysis has shown that each additional dollar spent in the child care sector generates a total of \$1.50-\$2.00 in the broader NYS economy. These results prove that child care has a positive economic impact even in the short term.

However, the primary impact of the early care and education sector is its investment in our collective future – preparing children for school, building the foundation for our future workforce and enabling parents to work.⁷³ The business community is beginning to recognize the value of the child care sector. The report released in 2002 by the influential Committee for Economic Development called for “the United States to acknowledge society’s stake in and responsibility for early education.” Public surveys show that the majority of people rank early education programs as a high priority.⁷⁴ There is now an opportunity for new partners from the business and economic communities to join with the child care and early learning community to enhance the quality of early education for New York’s children, in turn strengthening the regional economy.

⁷³ Art Rolnick and Rob Grunewald, “Early Childhood Development: Economic Development with a High Public Return,” available at <http://minneapolisfed.org/pubs/fedgaz/03-03/earlychild.pdf> Accessed May 10, 2003.

⁷⁴ Brandon, Richard, Effective Language for Discussing Early Childhood Education and Policy, available at <http://www.benton.org/Stratcom.PDF> Accessed May 11, 2003.

Appendix 1. Estimating the Number of Establishments

Table 9. Number of Establishments, New York State, Rest of State and New York City

NUMBER OF ESTABLISHMENTS - Entire State	Number of Establishments
Center Care*	3,806
Family Child Care*	10,983
Group Family Child Care*	3,665
School Age Child Care*	2,086
UPK Establishments**	
BOCES	34
Non Public School	164
Nursery School	328
Public School	1,124
No Permit Requirement	13
OTHER	19
Total UPK Establishments	1,682
Total Establishments	22,222
NUMBER OF ESTABLISHMENTS - Rest of State	Number of Establishments
Center Care*	1,892
Family Child Care*	5,856
Group Family Child Care*	2,320
School Age Child Care*	1,186
UPK Establishments**	
BOCES	34
Non Public School	64
Nursery School	75
Public School	446
OTHER	14
Total UPK Establishments Rest of State	633
Total Establishments	11,887
NUMBER OF ESTABLISHMENTS - New York City Only	Number of Establishments
Center Care*	1,914
Family Child Care*	5,127
Group Family Child Care*	1,345
School Age Child Care*	900
UPK Establishments**	
BOCES	-
Non Public School	100
Nursery School	253
Public School	678
OTHER	5
Total UPK Establishments New York City	1,049
Total Establishments	10,335

Sources:

*OCFS-Bureau of Early Childhood Services-Capacity worksheet given March 12, 2003

**New York State Department of Education: Memo from Dee Dwyer dated 12/02/02

UPK=These are the establishments not already counted in OCFS list of establishments (Labeled public school, non public school, nursery, no permit, other and BOCES)

Appendix 2. Estimating the Number of Children Served

Table 10. Capacity and Children Served

Licensed Care by Type*	Children Served
New York City	
Day Care Center	100,368
Family Day Care	38,012
Group Family Day Care	18,310
School Age Child Care	97,752
Subtotal	254,442
Rest of State	
Day Care Center	127,922
Family Day Care	44,538
Group Family Day Care	30,681
School Age Child Care	69,152
Subtotal	272,293
TOTAL	526,735
Subsidy Kids (not included in licensed capacity.)**	
Child's home by relative	10,846
Child's home by non-relative	11,575
Family home by a relative	19,098
Family home by a non-relative	26,282
Total	67,801
UPK***	
New York City	
Non Public School	1,821
Nursery School	4,306
Public School	11,627
No Permit Requirement	806
OTHER	69
New York City Total of UPK Children Not Included in Licensed Capacity	18,629
Rest of State	
BOCES	417
Non Public School	944
Nursery School	909
Public School	7,089
OTHER	271
Rest of State Total of UPK Children Not Included in Licensed Capacity	9,630
Total Number of UPK Children Not Included in Licensed Capacity	28,259
Total Number of Children Served by New York State	
Total Licensed Care	526,735
Subsidy Kids not Counted in Licensed Capacity	67,801
UPK not counted in Licensed Capacity	28,259
Total Children Served*	622,795

Note: Head Start/Early Head Start serves 52,158 children, and the state Migrant and CUNY/SUNY programs serve 11,941 children, all of which are included in the licensed care totals.

Sources:

*OCFS-Bureau of Early Childhood Services-Capacity worksheet given March 12, 2003

**ACF-800: CC& D Fund Annual Aggregate Report For Services Provided from 10/01-9/30/02

***New York State Department of Education: Memo from Dee Dwyer dated 12/02/02

Appendix 3. Employment Estimates

The Bureau of Labor Statistics uses the ES-202 Covered Employment and Wages to report 52,200 employees in the child care sector in 2002.⁷⁵ Likewise, IMPLAN uses the same source to find 52,791 workers. However, as discussed in the body of this report, there are many reasons to believe these numbers are an undercount. A large percentage of the sector is self employed or employed by a government program, which keeps them from being counted by these surveys.

The 1997 Economic Census reports 67,798 workers, including both employees and self-employed child care providers.⁷⁶ However, this may not account for administrative and support staff, and thus appears to be an undercount.

Since standard economic sources do not accurately count child care workers (in part due to the diversity of providers and many small providers who are not captured in the Unemployment Insurance system, on which ES-202 data is based), there have been several methodologies developed to estimate employment based on capacity, number of centers, and regulated teacher-child ratios. The following method, which finds a sum of 119,564 child care workers, uses OCFS numbers of providers, capacity and regulated ratios to estimate employment. It also includes a ratio to account for support and administrative staff, as well as UPK employment in public settings (not included in OCFS licensing data).

Table 11. Number of Employees, OCFS

Number of Employees	Explanation
11,015	Family care: There are 11,015 Family Care Centers, with one staff per center
7,274	Group Family: There are 3,637 Group Family Centers, for which it can be assumed two staff people
17,000	School age care: there is a capacity of 170,000 kids in school age care, with a ratio of 1:10
63,500	Centers: based on a day care center capacity of 230,000, with an average ratio of 1:5. Because most centers stay open from 7 am to 6pm, there is an additional 0.38 FTE for every one full time employee.
18,515	Administrative and support staff for centers and school age care based on ratios from retention data that indicate there is 0.23 non-direct care staff person for each direct care employee.
2,260	39% of UPK classrooms are in public schools, and therefore not included in OCFS capacity numbers. There are a total of 5,797 UPK teachers and teaching assistants.
119,564	TOTAL

Source: OCFS, Suzanne Sennett, April, 2003.

Two other estimates of employees, also based on ratios, were not used in this report because they undercounted employment by excluding part of the school age child care

⁷⁵ Bureau of Labor Statistics, ES202 Covered Employment and Wages (NAICS), available at <http://data.bls.gov.labjava.outside.jsp?survey=en> Accessed May 11, 2003

⁷⁶ 1997 Economic Census NAICS code 6244

and extra staff to cover the longer hours of staffing centers. We have included them to show alternative methods available.

Table 12. Number of Employees, Methodology from Russell Sykes and Ann Mitchell

Number of Employees	Explanation
45,468	Centers: 3,789 regulated centers as reported by OCFS, multiplied by estimated 12 staff per center. (This is a comparable number to the 46,001 number found using capacity and ratios.)
10,457	Administrative and support staff for centers. Data from the Retention Program suggests that for every 1 direct staff person there is 0.23 support or administrative staff.
17,980	14,384 regulated FCC Homes from OCFS multiplied by estimated 1.25 staff per center. (Assumed one staff per small FCC and two for group FCC and weighted heavily towards small homes).
2,260	39% of UPK classrooms are public schools, and therefore not included in OCFS capacity numbers. There are 5,797 UPK teachers and teaching assistants.
76,165	TOTAL

Source: Russell Sykes and Ann Mitchell. Estimates based on numbers of centers from OCFS; April, 2003.

Table 13. Number of Employees, Estimated using Regulated Ratios

25,626	Rest of State (ROS) Center Capacity from OCFS, multiplied by regulated ratios <table border="1"> <thead> <tr> <th>ROS</th> <th>Capacity</th> <th>Ratio</th> <th>Staff</th> </tr> </thead> <tbody> <tr> <td>Infant</td> <td>11,614</td> <td>4:1</td> <td>2,904</td> </tr> <tr> <td>Toddler</td> <td>21,478</td> <td>5:1</td> <td>4,296</td> </tr> <tr> <td>Pre-School</td> <td>80,138</td> <td>Av. 8:1</td> <td>10,017</td> </tr> <tr> <td>School-age</td> <td>84,093</td> <td>10:1</td> <td>8,409</td> </tr> </tbody> </table>	ROS	Capacity	Ratio	Staff	Infant	11,614	4:1	2,904	Toddler	21,478	5:1	4,296	Pre-School	80,138	Av. 8:1	10,017	School-age	84,093	10:1	8,409
ROS	Capacity	Ratio	Staff																		
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Pre-School	80,138	Av. 8:1	10,017																		
School-age	84,093	10:1	8,409																		
4,356	ROS Center administrative and support staff; multiplier of 1.17 from retention data base																				
22,591	NYC Center Capacity, assuming the same distribution of capacity by age as for ROS, multiplied by regulated ratios. <table border="1"> <thead> <tr> <th>NYC</th> <th>Capacity</th> <th>Ratio</th> <th>Staff</th> </tr> </thead> <tbody> <tr> <td>Infant</td> <td>9,277</td> <td>4:1</td> <td>3,575</td> </tr> <tr> <td>Toddler</td> <td>17,009</td> <td>5:1</td> <td>5,285</td> </tr> <tr> <td>Preschool</td> <td>61,851</td> <td>Av. 12:1</td> <td>8,191</td> </tr> <tr> <td>School age</td> <td>66,490</td> <td>Av. 12:1</td> <td>5,540</td> </tr> </tbody> </table>	NYC	Capacity	Ratio	Staff	Infant	9,277	4:1	3,575	Toddler	17,009	5:1	5,285	Preschool	61,851	Av. 12:1	8,191	School age	66,490	Av. 12:1	5,540
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11,015	Number of Family Centers, assumed one staff person.																				
7,274	There are 3,637 Group Family Centers, for which it can be assumed two staff people.																				
2,260	39% of UPK classrooms are public schools, and therefore not included in OCFS capacity numbers. There are 5,797 UPK teachers and teaching assistants.																				
79,674	TOTAL																				

Source: Estimated from capacity of centers and regulated ratios. Ratios are from the Department of Health and Human Services; Administration for Children and Families; New York; Accessed 10 May 2003.

<http://www.nccic.org/statepro/newyork.html>

Appendix 4. Employee Wages

The average wages reported in this paper are based on a variety of sources that center around \$19,000. The following table comes from wage information reported by the NYS Professional Retention Program data and from employment surveys.

Table 14. Average Wages, Various Sources

Rest of State Teachers: \$16,970	Retention Data 2002-2003, Rest of State Administrative Staff \$20,579 Aide \$12,094 Assistant Teacher \$12,935 Cook \$14,014 Director \$25,815 G/FDC Assistant Provider \$12,961 FDC or GFDC Provider \$16,942 Janitor/Custodial Staff \$13,101 Other direct \$16,855 Other non direct \$19,063 Teacher \$16,923
New York City Teachers: \$23,000	Retention Data 2002-2003; NYC Administrative Staff \$23,923 Aide \$13,256 Assistant Teacher \$19,806 Cook \$19,389 Director \$40,116 G/FDC Assistant Provider \$13,873 G/FDC Provider \$19,933 Janitor/Custodial Staff \$17,473 Other direct \$26,132 Other non direct \$22,144 Teacher \$27,525
\$14,895	1997 Economic Census ⁷⁷ 640,024,000 is the annual pay roll divided by for 42,967 employees; it excluded self-employed and small business owners.
\$17, 273	Bureau of Labor Statistics 2000; (Covered Employment and Wages-CEW) NAICS ⁷⁸
\$17,409	Center for Childcare Workforce (based on Occupational Employment and Wage Statistics, 1999)
\$19,480	NACCRRRA (Based on Occupational Employment Statistics, 2001)
\$19,610	Occupational Employment Statistics Survey Projected 2002. ⁷⁹ The projection is based on the Occupational Employment Statistics (OES) survey, Data were collected in 1999, 2000 and 2001 and then updated to the fourth quarter of 2002 by making cost-of-living adjustments. This source also breaks down entry level employees who earn \$14,530, and experienced who earn \$22,140

⁷⁷ U.S. Census Bureau; 1997 Economic Census: NAISCS 6244, Child Day Care Services, available at www.census.gov/epcd/ec97/industry/E6244.HTM May 11, 2003.

⁷⁸ U.S. Department of Labor, Bureau of Labor Statistics, Wages by Area and Occupation, available at <http://data.bls.gov/bls/blswage.htm> May 11, 2003.

⁷⁹ New York State Department of Labor; Occupational Employment Statistics; New York State and Labor Market Regions, Child care workers reference # 399011, available at <http://64.106.160.140:8080/lmi/oeswage.html> May 11, 2003.

Appendix 5. Estimating the Number of Working Parents

- Almost 750,000 working parents in New York State benefit from child care.
- There are 266,257 single or head of household earners claiming \$154,463,000 (average of \$580/parent) of New York State’s refundable Child and Dependent Care Tax Credit. The 239,589 married filing jointly total 479,178 working parents with children in care claiming \$47,087,000 (average of \$98/parent). The number of filers claiming the non-refundable Federal Dependent Care Credit was 402,447, just under \$197 million in credits and averaging almost \$490 per parent.⁸⁰ In total, there are almost 750,000 working parents benefiting from New York State’s refundable tax credit for child care (see Table 15). The Child and Dependent Care Credit helps parents pay the cost of child care for children under 13 years of age.

Table 15. New York State Refundable Child and Dependent Care Credit 2000

	<i>No. of filers</i>	<i>Amt (\$1,000)</i>
Total Filers	505,846	201,550
<i>Single</i>	9,328	5,429
<i>Married Jointly</i>	239,589	47,087
<i>Head of Household</i>	256,929	149,034
Additional Married Working Parent ¹	239,589	
Total Working Parents	745,435	201,550

Source: NYS Office of Tax Policy Analysis, Tax Year 2000

¹Married filing-jointly figure is doubled to account for both working parents that file under the same form.

Estimating Number of Working Parents Based on Census Data

Because US Census data on children under 13 years of age by family and parent working status is unavailable, the study team used data on “own children” under 6 years of age living with families and subfamilies by employment status of parents (Census 2000, SF-3, Table P46)⁸¹ and data on the number of families with “own children”, children under 6 years of age (Census 2000, SF-3, Table P15) to estimate the number of working parents per child (see Table 16).

⁸⁰ IRS Data, Memo from Russell Sykes of the Schuyler Center, 4/14/03

⁸¹ US Census data for “own children” living with families and subfamilies is slightly smaller than the total number of children because some children live with related families. For New York State, the total number of children under 6 years of age is 1,491,866 and the number of “own children under 6 years of age in families and subfamilies is 1,405,240.

Table 16. Data Used for Estimating Number of Working Parents Per Child

Total number of children under 6 years of age living with families and subfamilies, (Census 2000, SF-3, Table P46)	1,405,240
Number of children under 6 years of age living with working parents (excludes dual-parent households with only one parent in labor force), (Census 2000, SF-3, Table P46)	764,721
<i>Number of children under 6 years of age living in dual-parent families, both parents in labor force, (Census 2000, SF-3, Table P46)</i>	488,013
<i>Number of children under 6 years of age living in single parent families, parent in labor force, (Census 2000, SF-3, Table P46)</i>	276,708
Number of families with children under 6 years of age, (Census 2000, SF-3, Table P15). ⁸²	999,401

Estimating the number of working parents per child in NYS requires essentially four steps.

Table 17. Estimating Number of Working Parents per Child in NYS

Step 1	Ratio of children under 6 years of age to families with children under 6 years of age	
	= 1,405,850/999,401	1.41
Step 2	Ratio of working parents with under children under 6 years of age to children in families where all parents are in the labor force.	
	= [(488,013*2)+276,708]/764,721	1.64
Step 3	The number of working parents per child is estimated as the ratio of working parents per children of working families divided by the ratio of children to families.	
	= 1.64 / 1.41	1.17

The 2000 Census shows that there are 764,721 children under age 6 in New York living with working parents (Table 17). According to the Census, there are 1.17 working parents associated with each child under age 6. Thus, we estimate that there are over 894,723 (1.17 x 764,721) working parents associated with these children under age 6 (see Table 18). However, not all parents have children in paid child care. In New York, only 745,435 parents claim the state Child and Dependent Care Tax Credit (DCTC).

⁸² The US Census breaks families with children under 18 years of age into three categories: families with children under 6 years of age only, families with children under 6 years of age and children 6-17 years of age, and families with children between ages 6-17 years only. In order to get the total number of families with children under 6 years of age, we added the number of families with children under 6 years of age only (519,519) to the number of families with children under 6 years of age and 6-17 years of age (479,882).

Estimating Number of Working Parents Who Receive Child Care Subsidies

We estimated the number of working parents who receive child care subsidies, based on data and methodology from the Office of Child and Family Services (OCFS). OCFS estimates that there are an average of 1.5 children in each of the 116,752 families receiving subsidies, and that 1 of 9 families have two parents. Thus there are approximately 130,000 working parents that benefit from the subsidy system (Table 19). With that, we estimated the total earnings of those parents. The wage of a low-wage worker in 2001 (defined as a worker at the 20th percentile) was \$8.07/hr or almost \$13,275/yr (assuming a 35 hour work week for 47 weeks).⁸³ We estimate that subsidies enable 130,000 parents to collectively earn \$1.7 billion.

Table 19. Estimated Number of Working Parents Receiving Child Care Subsidies

	<u>2002</u>
Number of Subsidy Cases (Families)	116,752
Number of Children per Case	1.5
Ratio of Two-Parent to Single-Parent Families	1/9
All families + second parents in two-parent households	$116,752 + (116,752/9) =$
Total Working Parents	129,724

Source: OCFS, Suzanne Sennett, May 2003.

⁸³ Economic Policy Institute. State of Working America (2002) The average weekly hours of an employee in the Retail Trade sector is 35 hours (p240). The wage of a worker at the 20th percentile is \$8.07 in 2001\$ (at the 10th percentile it is \$6.69) (p128). In 2000 the average number of weeks worked for a worker is 47 (p117).

Appendix 6. Government Investments in Child Care

Table 20. Source of Government Investments in Child Care, 2002

	Federal Dollars	State Dollars	Local Dollars⁷	Total Dollars
Child Care Block Grant ¹	\$ 331,000,000	\$ 96,000,000	\$ 68,000,000	\$ 495,000,000
TANF Transfers to CCBG ¹	\$ 418,000,000			\$ 418,000,000
Title XX ²	\$ 68,670,000			\$ 68,670,000
UPK ³		\$ 205,000,000		\$ 205,000,000
Head Start / Early Head Start ⁴	\$ 419,957,000			\$ 419,957,000
CUNY ⁵		\$ 2,095,000		\$ 2,095,000
SUNY ⁵		\$ 2,533,500		\$ 2,533,500
CACFP (Food) ⁶	\$ 128,646,627			\$ 128,646,627
Total	\$ 1,366,273,627	\$ 305,628,500	\$ 68,000,000	\$ 1,739,902,127

1. DOB Data, Email from Rus Sykes on 4/14/03

2. OCFS Child Care Funding FY 2002

3. NYS Dept. of Education, June 7, 2002, <http://www.emsc.nysed.gov/nyc/upk0607mem.htm>

4. US Dept. of HHS, Head Start Bureau

5. New York State Higher Education Budget

6. CACFP, Budget for New York State

7. This number includes local match and maintenance of effort funds, but New York City and some counties also add to their own subsidy programs.

The leverage of federal dollars was determined by dividing the federal expenditures by the combined state and local expenditures on child care. The result was that the State of New York leverages approximately \$3.66 in Federal revenue for every \$1 spent on child care.

Appendix 7. Gross Receipts Estimates

Gross receipts include both private payments by parents to providers and government supported early education. To estimate gross receipts we took average price per type of care and age of child for each county from the NYS Market Rate survey and then aggregated these across all counties in the state to estimate private pay receipts. Government paid programs such as UPK and Head Start and direct subsidies to providers were then added to get total gross receipts.

Table 21. Gross Receipts Estimates, 2002

Source	Receipts
Private Sector Rest of State	
Centers	\$ 1,052,000,000
Family Care	\$ 303,000,000
Group Family Care	\$ 242,000,000
School Age Care	\$ 207,000,000
Rest of State Subtotal	\$ 1,803,000,000
Private Sector New York City	
Centers	\$ 1,132,000,000
Family Care	\$ 247,000,000
Group Family Care	\$ 136,000,000
School Age Care	\$ 324,000,000
New York City Subtotal	\$ 1,839,000,000
Private Sector Total	\$ 3,642,000,000
Government Sector Total	\$ 1,029,000,000
Total Gross Receipts	\$ 4,671,000,000

Source: Market Rate Survey data, OCFS and DOB, May 2003.

Table 22. Detailed Gross Receipts Estimates 2002

Rest of State	
Centers	\$ 1.05 Billion
Family Care	\$.30 Billion
Group Family Care	\$.24 Billion
School-Age Care	\$.21 Billion
Total	\$ 1.80 Billion
NYC	
Centers	\$ 1.13 Billion
Family Care	\$.25 Billion
Group Family Care	\$.14 Billion
School-Age Care	\$.32 Billion
Total	\$ 1.84 Billion

Formula

Weekly Cost of Care by Age x Capacity by Age x 52 weeks for infant, toddler and preschool care + [Part-time School age Cost x Total Capacity x 40 weeks (school year)] + [Full-time Cost x Total Capacity x 12 weeks (summer)]

Weekly Average Cost Across All Age Brackets x Total Capacity x 52 weeks

Weekly Average Cost Across All Age Brackets x Total Capacity x 52 weeks Part-time Cost x Total Capacity x 40 weeks (school year) + [Full-time Cost x Total Capacity x 12 weeks (summer)]

Total	
Centers	\$ 2.18 Billion
Family Care	\$.55 Billion
Group Family Care	\$.38 Billion
School-Age Care	\$.53 Billion
	\$ 3.64 Billion

School age children are calculated at the part-time rate for 40 weeks and the full time rate for 12 weeks. The summer charges for full-time care for school-age children serves as a proxy for summer camp and other summer programs.

The CCR&R survey currently underway suggests that prices in New York State are slightly lower than the OCFS market rate prices used in this report. For center and family/group family care, the average price tends to be 80%-100% of the market rates. For part-time school age care, the average price is higher than the market rates.

Gross Receipts for Government Pay in NYS Methodology

Government investments include publicly funded programs such as UPK and Head Start and direct subsidies to providers. We also included subsidies paid to informal providers not already counted in the licensed system.

Table 23. Distribution of Government Sector Pay in Gross Receipts, 2002

Quality ¹	\$	70,000,000
CUNY ²	\$	2,095,000
SUNY ²	\$	2,533,500
Child and Adult Care Food Program ³	\$	128,646,627
UPK ⁴	\$	205,000,000
Head Start / Early Head Start ⁵	\$	419,957,000
Subsidies ⁶	\$	201,000,000
Total:	\$	1,029,232,127

Sources:

1. National Child Care Information Center. <http://www.nccic.org/pubs/stateplan/charts-tables/table 5-2.html>
2. NY State Higher Education Budget
3. Memo from Sandra Rhoades, Child and Adult Care Food Program, April 9, 2003.
4. NYS Education Dept. June 7, 2002, <http://www.emsc.nysed.gov/nyc/upk0607mem.htm>
5. US Dept. of Health and Human Services, Head Start Bureau

Appendix 8. Geography

For this report, we selected several different areas of New York State to analyze for economic linkage effects using input-output analysis. The technical advisory committee of this report chose the areas. The committee endeavored to pick areas of New York that illustrated different kinds of regional economies. Some counties were linked together because they represented a single labor market area.

We chose counties within five different categories:

1. New York State as a whole

2. Rest of state without New York City

3. New York City (five boroughs)

4. *MSA groupings*

Albany-Schenectady-Troy MSA:	Albany, Montgomery, Rensselaer, Saratoga, Schenectady and Schoharie Counties
Buffalo-Niagara Falls MSA:	Erie and Niagara Counties
Nassau-Suffolk PMSA:	Nassau and Suffolk Counties
Rochester MSA:	Genesee, Livingston, Monroe, Ontario, Orleans and Wayne Counties
Syracuse MSA:	Cayuga, Madison, Onondaga and Oswego Counties

5. Counties with under 100 providers – three groups: low income, middle income, higher income:

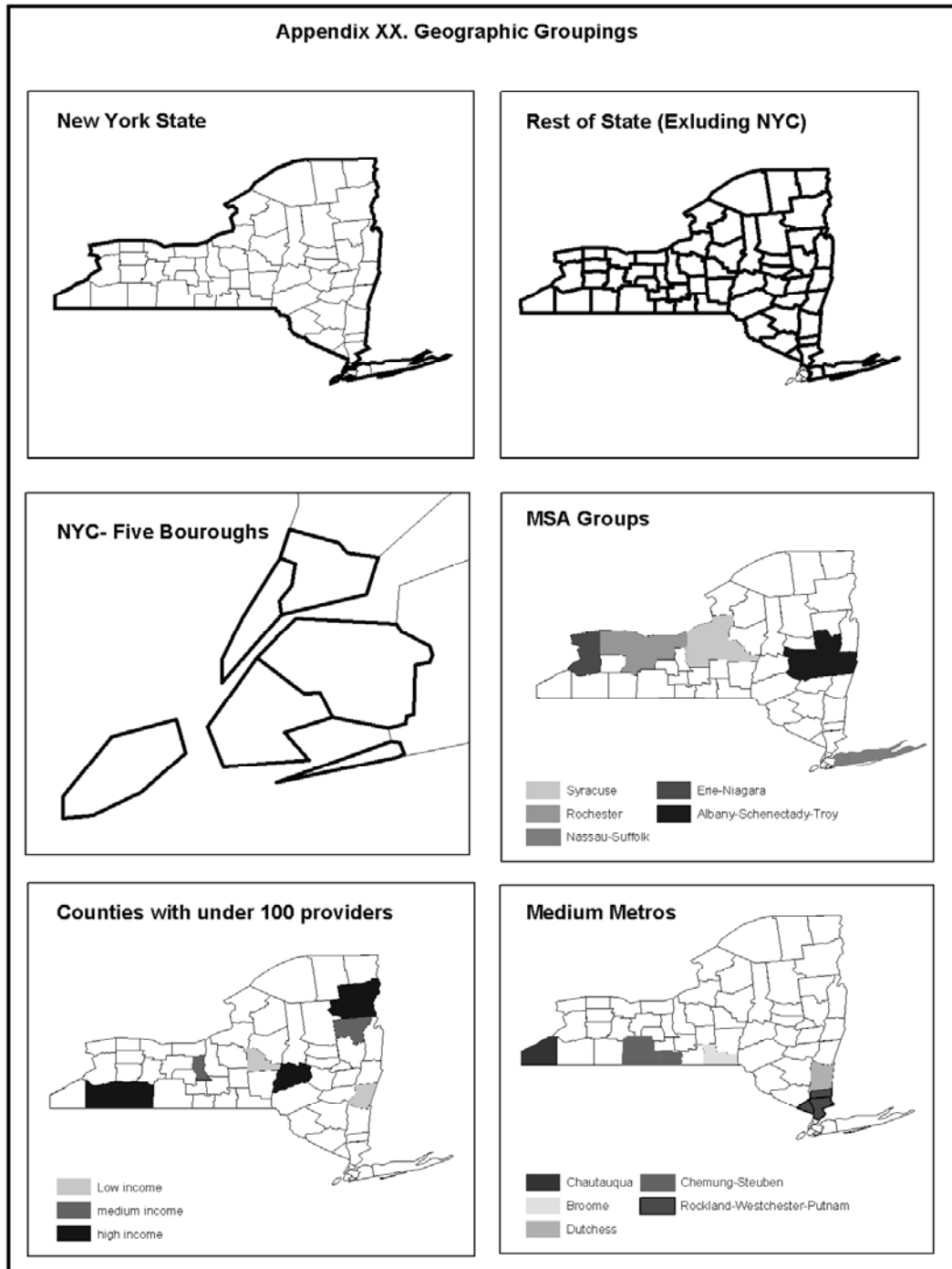
Median household income < \$35,000	Allegany and Cattaraugus (together), Essex, Otsego
Median Household Income < \$40,000	Seneca and Warren
Median Household Income > \$40,000	Columbia and Madison

6. Medium Metro counties

- NYC suburbs: Rockland, Westchester, Putnam as a group
- Chemung and Steuben together
- Dutchess
- Broome
- Chautauqua

Figure 10 on the next page shows the areas we analyzed for their economic linkage effects using input-output analysis.

Figure 10. Geographic Groupings



Appendix 9. Input-output Analysis Results by Geography

Regional economic modeling known as input-output analysis can be used to measure the linkage effect of any industry. The IMPLAN modeling software used for this analysis includes 540 sectors in the regional models for New York State, including child care. Input-output models are based on the assumption that export demand (or the ability of industries to sell to the external economy) is the engine that generates growth in the regional economy. Export growth infuses local industries with new funds, which they use to increase output and employment. In the case of child care, the only demand that comes from outside the region is federal investment in the state's child care sector. Households are the primary purchasers of child care, and demand is usually local.

Input-output models measure the demand from each industry to its suppliers.⁸⁴ The child care sector primarily purchases labor, supplies and food from other sectors. Because most of these purchases are local, child care has a strong linkage effect in the local economy. In fact, child care's multipliers are higher than many sectors which receive significant economic development support. For our input -output analysis, we looked at both the employment and output multipliers for the child care sector.

- An output multiplier, in the case of the child care industry, estimates the total sales that would result from each dollar of increased direct spending for child care services
- The employment multiplier is an estimate of the jobs that would be created throughout the whole economy from the addition of one new job in the child care industry, which was added due to increased demand for child care services

Multipliers can measure both industry output and employment at Type I and Type II levels. Type I multipliers include both the direct and indirect effects and count the impacts of inter-industry purchases. Type I multipliers are most appropriate for estimating the economic linkage effects of changes in internal (state or local) demand.

Each additional state or local \$1 spent on child care in New York stimulates a total of \$1.52 in activity in the state economy.

Each additional job created by increased local demand for child care generates a total of 1.26 jobs in the broader state economy.

Type II multipliers include direct, indirect and induced effects (purchases made by the household sector as child care workers spend their wages throughout the economy). Type II multipliers are most appropriate for estimating changes in external demand. In

⁸⁴ These linkages are called backward linkages. However, the most significant linkages for the child care industry may be its forward linkages, because it enables parents to work – supplying labor to other sectors. To measure the full economic impact of the child care sector both forward and backward linkages should be counted. Cornell researchers are currently working on a model to do this.

the case of child care, changes in external demand are typically triggered by changes in federal funding.

Each additional federal \$1 spent on child care in New York generates a total of \$2.04 in economic activity throughout the state.

Each additional job created by an increase in external demand for child care generates a total of 1.52 jobs through the state.

The table below separates the direct, indirect and induced effect for employment and output multipliers. It shows all the results for the geographies that we were interested in looking at within New York State.

Multiplier effects will be very different depending on the size and economic organization of the selected region. Although we might expect regions with larger geographic areas to have higher multipliers, this result is not always the case due to the way that regional economies are structured. There is a short discussion of the findings following Table 24.

Table 24. Input-output Results for Selected Geographic Groupings

	direct	indirect	induced	total	type I	type II
1. New York State						
Employment	20.31	5.22	5.40	30.93	1.26	1.52
Output	1.00	0.52	0.52	2.04	1.52	2.04
2. New York State w/o NYC						
Employment	22.22	6.39	6.03	34.64	1.29	1.56
Output	1.00	0.58	0.51	2.09	1.58	2.09
3. NYC (5 Boroughs)						
Employment	17.94	4.11	4.19	26.24	1.23	1.46
Output	1.00	0.43	0.46	1.89	1.43	1.89
4. MSA groupings						
•Albany-Schenectady-Troy MSA						
Employment	21.95	6.13	5.62	33.70	1.28	1.54
Output	1.00	0.52	0.45	1.97	1.52	1.97
•Buffalo-Niagara Falls MSA						
Employment	23.45	6.99	6.23	36.67	1.30	1.56
Output	1.00	0.58	0.48	2.06	1.58	2.06
•Nassau-Suffolk PMSA						
Employment	20.47	4.89	4.74	30.10	1.24	1.47
Output	1.00	0.48	0.44	1.92	1.48	1.92
•Rochester MSA						
Employment	23.28	6.48	5.46	35.21	1.28	1.51
Output	1.00	0.54	0.42	1.96	1.54	1.96

●Syracuse MSA

Employment	22.86	6.53	6.00	35.39	1.29	1.55
Output	1.00	0.54	0.47	2.01	1.54	2.01

5. Medium Metros

●NYC Suburbs

Employment	20.75	4.97	4.19	29.91	1.24	1.44
Output	1.00	0.50	0.42	1.93	1.50	1.93

●Chemung Steuben

Employment	24.59	6.46	4.41	35.46	1.26	1.44
Output	1.00	0.48	0.31	1.79	1.48	1.79

●Dutchess

Employment	22.01	5.84	4.70	32.54	1.27	1.48
Output	1.00	0.50	0.37	1.86	1.50	1.86

●Broome

Employment	24.23	7.19	5.45	36.87	1.30	1.52
Output	1.00	0.52	0.38	1.91	1.52	1.91

●Chautauqua

Employment	22.62	6.25	5.03	33.90	1.28	1.50
Output	1.00	0.43	0.33	1.76	1.43	1.76

6. Counties with Under 100 providers

Low income

●Allegany-Cattaraugus

Employment	24.81	6.07	4.02	34.90	1.24	1.41
Output	1.00	0.41	0.26	1.67	1.41	1.67

●Essex

Employment	25.91	5.98	3.13	35.02	1.23	1.35
Output	1.00	0.42	0.21	1.63	1.42	1.63

●Otsego

Employment	24.41	5.73	4.16	34.30	1.23	1.41
Output	1.00	0.40	0.28	1.68	1.40	1.68

Medium income

●Seneca

Employment	26.01	6.18	3.16	35.35	1.24	1.36
Output	1.00	0.42	0.21	1.63	1.42	1.63

●Warren

Employment	23.21	6.00	4.99	34.20	1.26	1.47
Output	1.00	0.46	0.36	1.82	1.46	1.82

High income

●Columbia

Employment	26.28	7.41	3.14	36.83	1.28	1.40
Output	1.00	0.53	0.23	1.76	1.53	1.76

●Madison

Employment	25.87	6.26	3.76	35.89	1.24	1.39
Output	1.00	0.46	0.25	1.71	1.46	1.71

Source: IMPLAN multipliers based on 2000 data, analysis by Cornell University

Type I multiplier = (Direct+Indirect)/Direct; Type II Multiplier = (Direct+Indirect+Induced)/Direct

Geography matters

Figure 11. Total Output Multiplier by Geography

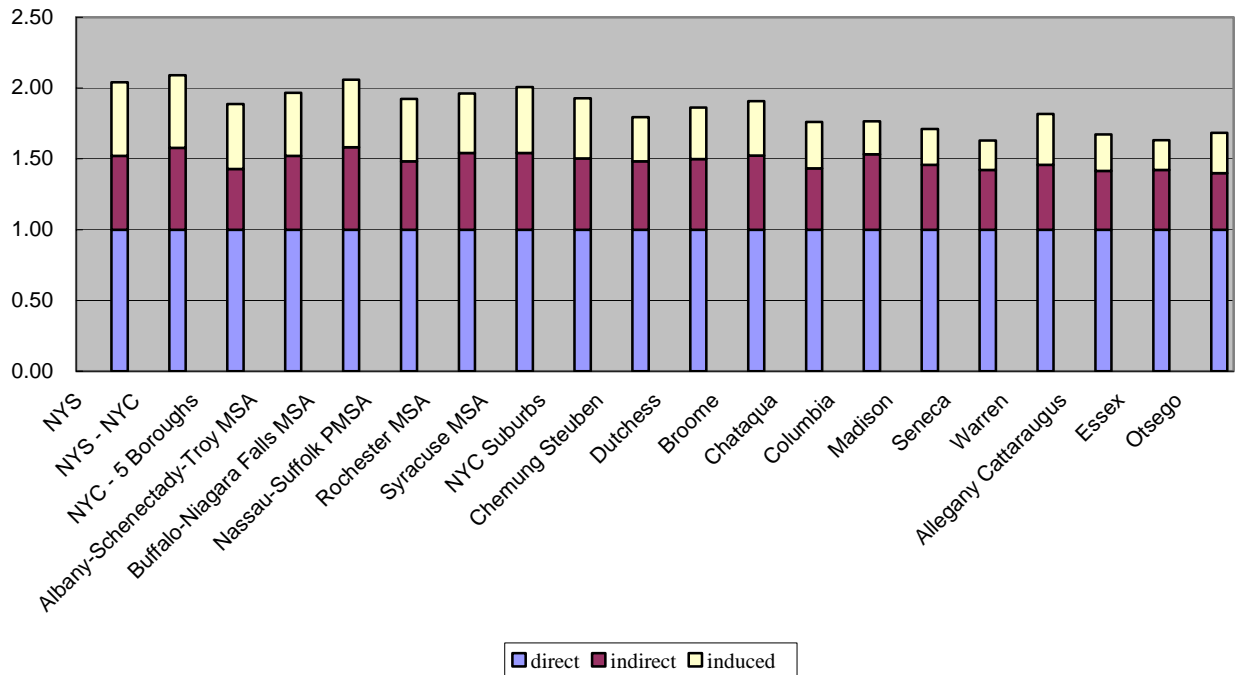


Figure 11 demonstrates some variation of output multipliers for child care across New York State, ranging from 1.63 to 2.09. The fact that child care is a service sector with labor as its primary input may depress the variation of multipliers between regions. This is because the sector generally employs (buys labor) locally, no matter the size of the geographic area considered.

The chart begins with the larger areas – the state, upstate, New York City – and then moves to the metropolitan areas, medium metropolitan areas, and counties with few providers (more rural areas). Several factors are evident: the five boroughs of New York City have a lower multiplier than the rest of the state. This may be because the New York City economy is truly a tri-state regional economy, so there is a lot of leakage to the wider metropolitan area and indeed to the world at large from the five boroughs. A second standout is the high multiplier for the Buffalo-Niagara Falls MSA. This suggests that Buffalo is a relatively self-sufficient economy due to its isolated location in the northwest corner of the state, surrounded by the Great Lakes and the Canadian border. Also, the Nassau-Suffolk PMSA has a lower output multiplier than the other large metropolitan areas, possibly because of its economic leakage to New York City and to the larger world. In general, the multipliers are lower for the more rural areas, suggesting that there is heavier leakage from these areas to surrounding economies. Columbia and Madison counties (the higher income rural counties) have higher multipliers than the lower income counties.

Appendix 10. Government Definitions of the Child Care Industry

The Bureau of Labor Statistics has broadened its definition of the child care sector. The 1987 SIC definition focused on the care of children before reaching school age and after school programs.⁸⁵ In 2002, the government added babysitting and pre-kindergarten centers to the current NAICS definition. This shift acknowledges the educational advantages of child care.⁸⁶

SIC 8351 Child Day Care Services

Establishments primarily engaged in the care of infants or children, or in providing pre-kindergarten education, where medical care or delinquency correction is not a major element. These establishments may or may not have substantial educational programs. These establishments generally care for pre-kindergarten or preschool children, but may care for older children when they are not in school. Establishments providing babysitting services are classified in Industry 7299. Head Start centers operating in conjunction with elementary schools are classified in Industry 8211.

- Child day care centers
- Family day care services
- Head Start centers, except in conjunction with schools
- Nursery schools
- Preschool centers

2002 NAICS 624410 Child Day Care Services

This industry comprises establishments primarily engaged in providing day care to infants or children. These establishments generally care for preschool children, but may care for older children when they are not in school and may also offer pre-kindergarten educational programs.

Cross-References. Establishments primarily engaged in offering kindergarten educational programs are classified in Industry 611110, Elementary and Secondary Schools.

- Babysitting Services
- Child day care centers
- Family day care services
- Head Start programs
- Nursery Schools
- Pre-kindergarten centers (not part of elementary school system)
- Preschool centers

⁸⁵ Occupational Safety and Health Administration, U.S. Department of Labor, Child Day Care Services, SIC Code 8351, available at <http://www.osha.gov/cgi-bin/sic/sicser2?8351> May 11, 2003.

⁸⁶ U.S. Census Bureau, Child Day Care Services, 2002 NAICS Definitions, available at <http://www.census.gov/epcd/naics02/def/ND624410.HTM> May 11, 2003.

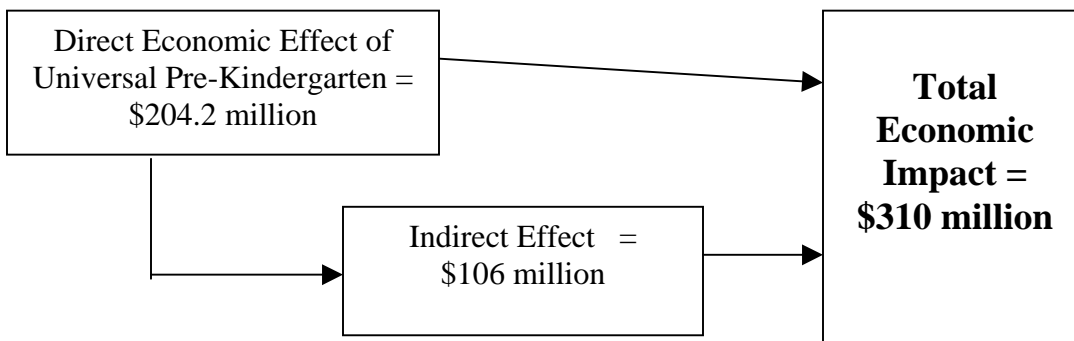
Appendix 11. Universal Pre-Kindergarten

Reports have shown that quality early learning programs improve school readiness. New York State invests in an early learning program known as Universal Pre-Kindergarten (UPK). UPK is a state funded program that provides free early childhood education for four year old children. New York State currently has a total of 54,150 children in UPK. Estimated funding for the 2002-2003 school year is \$204.2 million.⁸⁷

UPK has an impact on the New York State economy due to the fact that both public and private establishments receive funding. One of the scenarios in the 2003 state budget debates was to eliminate the UPK program. A cut of this magnitude would create a “shock” to the early care and education system. The total effects would reach beyond the direct effects on early learning programs. Licensed care spaces would shrink, teachers and teaching assistants would no longer be employed and the dollars that classrooms would spend on supplies, food, furniture, and other expenses would no longer generate demand for other New York industries.

An input-output analysis can be used to measure the broader regional economic impact of such a “shock.” The \$204.2 million that UPK receives in state funds creates a direct impact of \$204.2 million in the New York State economy through teacher salaries and class space rent payments. Indirect impacts from UPK that occur when providers buy goods from other industries equal \$106 million (204.2×0.52). The total economic linkage effect on the state’s economy of a cut in UPK is \$310 million dollars. Because these are state funds, we used a Type I multiplier.

Figure 11. Economic Effects of Cutting the UPK Program



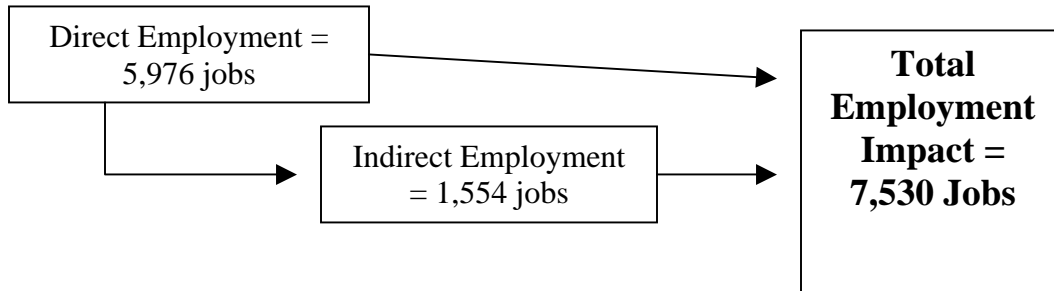
Analysis based on NYS Dept of Education data 2002. IMPLAN indirect multiplier (Type 1) conducted by Cornell University using NYS 2000 data

A similar analysis was conducted on the overall effects of UPK employment. UPK directly employs 5,976 workers. If the program were totally cut, the direct jobs would be lost and an additional 1,554 ($5,976 \times 0.26$) jobs would be lost through the linkage effect. The total employment impact of cutting the UPK program would be 7,530 jobs in the

⁸⁷ New York State Department of Education: Memo from Dee Dwyer dated 12/02/02

NYS economy. Early education provides important jobs to the early care and education sector, and prepares New York's children for school – thus building our future work force.

Figure 12. Employment Effects of Cutting the UPK Program



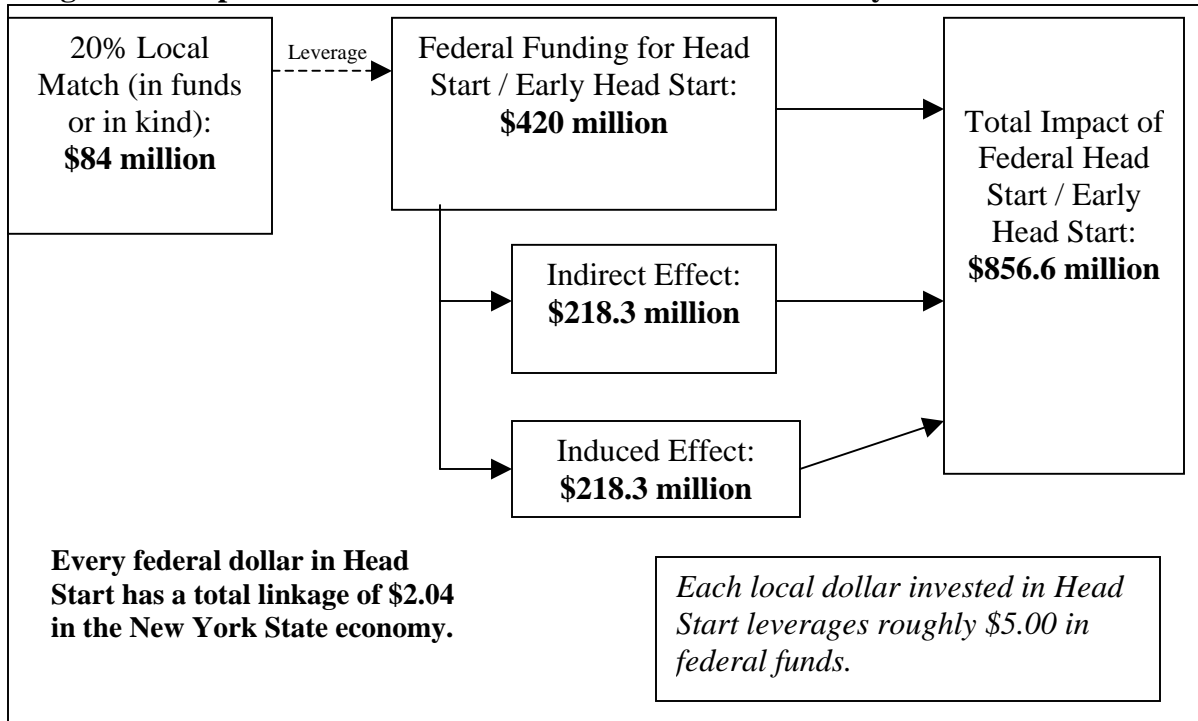
Analysis based on NYS Dept of Education data 2002. IMPLAN indirect multiplier (Type I) conducted by Cornell University using NYS 2000 data

Appendix 12. Head Start

Head Start is an important early education program that provides educational support to infants and preschoolers. In New York State over 52,000 are served – 47,902 children are served in Head Start and 4,256 in Early Head Start.⁸⁸ Head Start is a federally funded program and as such represents a source of external demand for early education in New York State. These dollars help strengthen the number and quality of early education in NYS, and also help stimulate the broader economy.

Federal funding for Head Start/Early Head Start in New York State totaled \$420 million in 2002. The program requires a 20% match of local funds, which may be provided in kind. Frequently, a community provides rent-free facilities or other goods for the Head Start program to leverage significant federal dollars coming in to their community.⁸⁹ Thus each \$1 provided in funds or in kind by communities leverages \$5 in federal Head Start funds. The federal funds ripple through local economies through inter-industry purchases and employment. Each federal \$1.00 has a total linkage effect in the state economy of \$2.04. The local leverage and the federal linkage effect combine to reach a total impact of \$10.00 ($\$2.04 * \5.00) for every \$1.00 in local match provided.

Figure 13. Impact of Head Start Funds on New York Economy



Analysis based on US Department of Health and Human Services, Head Start Bureau data 2002. IMPLAN analysis using Type II multiplier $[(\text{direct} + \text{indirect} + \text{induced effects}) / \text{direct effects}]$ conducted by Cornell University using NYS 2000 data

⁸⁸ OCFS Bureau of Early Childhood Services, 2003

⁸⁹ Memo from Susan Gibbons, New York State Head Start Association, May 16, 2003

Appendix 13. Child Care Resource and Referral Agencies

Child Care Resource and Referral Agencies (CCR&Rs) also contribute directly to the economy through their own employment and output, including operating costs of programs. The network of CCR&Rs in New York covers every county and New York City. The 42 CCR&Rs have global budgets that total \$77.6 million to accomplish their mission of supporting providers, creating supply, and helping families find child care that meets their needs. Of the total funding, New York State provides a total of \$16.6 million per year to CCR&Rs, \$5.1 million of which is passed on to child care providers, including the Family Day Care Start-up Grants and the Family Day Care Health and Safety Grants. The base funding and funding for fingerprinting, the infant/toddler initiative, and registration is for programs conducted by the CCR&Rs themselves. There are 169 employees at the CCR&Rs that work with the state-funded programs, as well as additional employees in other programs.⁹⁰ Many CCR&Rs secure additional funding through local governments, foundations, or other grants for enhanced programming. Only state funding from OCFS is included in the table below.

As intermediaries, the CCR&Rs are an important component of the child care sector. However, the employment and revenues of the CCR&Rs are not included in the gross receipts and employment calculations used in this report.

Table 24. Total State Funding for CCR&Rs

Funding Stream	Amount Given
Base Funding	\$ 5,500,099
Family Day Care Start-up Grants	\$ 2,176,250
Family Day Care Health and Safety Grants	\$ 1,194,481
Informal Provider Funding	\$ 1,752,800
Fingerprinting Funding	\$ 574,700
Infant/Toddler Initiative	\$ 1,200,000
Sub-Total	\$ 12,398,330
Registration Funding	\$ 4,204,761
TOTAL	\$ 16,603,091

Source: OCFS CCR&R Data, May 2003.

⁹⁰ NYS Child Care Coordinating Council (NYSCCCC) asset mapping project. Information given by Ana Winans, NYSCCCC, July 8, 2003.

Appendix 14. New York Child Care Resource and Referral Agencies Preliminary Survey Results, 2003

The New York State Child Care Coordinating Council conducted a survey of member Child Care Resource and Referral agencies (CCR&Rs) in the spring of 2003, with Cornell University. We started with the idea that family and group family care providers might be undercounted in the available licensed data and that the market rates might be higher than local prices of care. We had no data on legally exempt care, such as part-time programs and family, friend and neighbor care. We also wondered how capacity compared to actual enrollment. The intent of the survey is to provide more accurate information to enrich the New York State economic impact analysis. Preliminary results from the study suggest that data from the NYS Office of Child and Family Service Child Care Division (OCFS) that were used in the report were fairly accurate for licensed care.

The survey is a web-based instrument that each CCR&R was asked to complete for the county or counties that it serves. They could submit the survey online or print and fax it in. The major measures requested include: number of establishments and capacity by age for centers, family care, group family care and registered school age programs. The survey also contains questions about nursery schools, private school or church-based part-time programs, license-exempt school age programs, and legally exempt informal care (providers that care for only two children). A total of 40 counties and New York City,⁹¹ 73% of the 62 counties in the state, are represented in the survey, however, some responses included multiple counties and thus were not directly comparable to the OCFS data.

The simplest way to compare the two sets of data is to compare within each county. The wide variations in county size and population across NYS make comparisons between counties less useful. For the major questions on the survey, we will look at ratios of the CCR&R responses to the OCFS numbers. The source for all of the data is the CCR&R survey results, available through the NYS Child Care Coordinating Council (unpublished), and the licensing data and Market Rate Survey data from OCFS, April 2003.

Establishments

There are 27 counties that report establishment numbers comparable to OCFS data. The ratios of CCR&R survey total establishments to OCFS total establishments range from 0.76 to 1.19 (with 2 outliers). The average is 0.94, and the median is 0.99. This suggests that the number of licensed establishments used in the report is accurate. The largest differences in county reports are within family and group family establishments, which vary as providers enter or leave the field. School age child care was excluded from this comparison because too few counties reported on this type of care.

⁹¹ New York City comprises five counties: New York, Bronx, Kings, Queens, and Richmond, so 45 counties responded in all.

License-Exempt Establishments

Twenty-six of 33 counties that responded to the survey report some type of unlicensed care, including nursery schools, part-time care, and informal care. The results suggest that the number of informal and unlicensed establishments can range as high as 70% - 85% of the total number of establishments in the county (including both licensed and unlicensed). The percentage of license-exempt establishments in the total establishments ranges from 2% to 85%. The average is 28%, and the median is 20%. On the survey, 79% of counties report nursery schools, 42% report license-exempt part-time programs, and 55% report legally exempt informal care in their counties. The largest numbers of establishments reported are the legally exempt informal care providers. Because these establishments only have a capacity of two children, they do not increase the total capacity of the county as much as they increase the establishment totals.

Licensed Capacity

With 28 counties reporting total licensed capacity, the ratio of CCR&R capacity to OCFS capacity ranges from 0.76 – 1.53 (excluding two outliers). The average and the median are both 0.98. This suggests again that the OCFS data used in the report is accurate for licensed establishments and capacity. Twelve of 28 counties (43%) report higher licensed capacity in centers and family/group family care than the OCFS licensing data.

Rockland County has the highest ratio of establishments and the highest ratio of total capacity. It may be that this county, which is a growing suburb of New York City, is experiencing an increase in child care due to an expanding population.

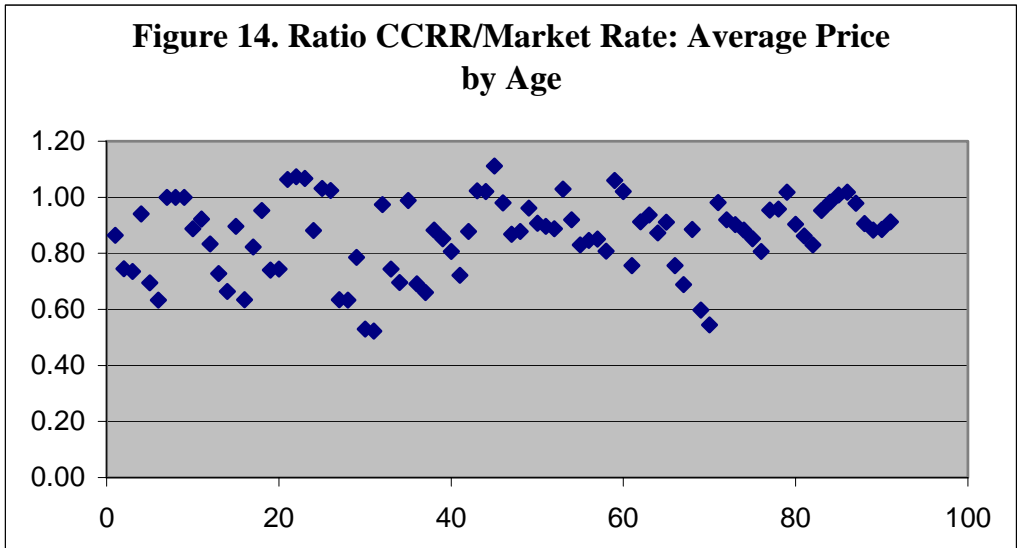
Utilization

Of the 32 counties that report legal capacity, only 16 report utilization for each type of care. The ratio of enrollment to legal capacity gives the utilization rate for each type of care in the county. This can be used to calculate a vacancy rate (1 - utilization rate). For center care, the utilization rate ranges from 76% - 100%. The average is 91% and the median is 93%. For family care, the utilization ranges from 64% - 97%, with an average of 89% and a median of 91%. The utilization rate is lowest for group family care, with a range from 52% to 97%, an average of 84% and a median of 86%.

Price of Care

The CCR&R survey results suggest that prices in New York State are slightly lower than the OCFS market rate prices used in the report. Thirty-nine counties report average prices by type of care (some responses give an average for multiple counties). For center and family/group family care, the average price tends to be 80%-100% of the market rates. Given that New York State pegs its market rate at the 75th percentile of prices, these survey results suggest that the market rates are reasonably accurate. For part-time school age care, the average price is higher than the market rates.

This result can be observed graphically, by noticing how many of the points fall below 1.0, concentrated in the band between 0.8 – 1.0. Figure 14 illustrates the ratio of the average price by age group in centers, family and group family homes reported on the CCR&R survey to the Market Rate Survey done by OCFS.



Hamilton, Warren, and Washington Counties (reported together), and Niagara County are the only counties that report higher average prices than the market rates across all types of care. Most counties report average prices lower than market rates, with center prices closer to market rates, and family/group family prices noticeably lower. Putnam, Rockland, Sullivan and Ulster Counties, all counties in the southern Catskills or exurban New York City, are the only counties to report that family/group family prices are closer than center prices to market rates.