

Early Care *and* Education: A Vital Economic Sector in Steuben County

An Economic Analysis

“A high quality early care and education system, like roads and bridges, is part of the infrastructure for economic development.”

~Professor Mildred Warner, Cornell University



This report was prepared by the New York State Child Care Coordinating Council (NYSCCCC) for Steuben Child Care Project, a Division of ProAction of Steuben and Yates, Inc.



Early Care and Education:

A VITAL ECONOMIC SECTOR For Steuben County

For many years now, child care has been recognized as a support for working parents and a learning environment for children. Increasingly, however, noted economists as well as many within state and local government have come to recognize the significant impact that the early care and education sector has on the economy. This report documents how the number of early care and education establishments, their capacity, the employment they provide and their gross receipts impact Steuben County's economy.

Steuben County Overview

Steuben County is located in the Southern Tier area of New York State. With a population of over 100,000, the county is a diverse area containing rural communities, small towns and three small, active cities. These three cities - Bath, Hornell and Corning -- are home to a number of major corporations including Corning Inc., Corning Hospital, Stern & Stern Industries, Philips Lighting, Alstom Transportation, Panalogic Incorporated, Mercury Aircraft and The Gunlocke Company. These businesses focus on manufacturing and are leaders in their industries. It is the early care and education system in turn that supports these corporations by supporting their employees and helps to ensure the economic stability of Steuben County.

The Early Care and Education Sector

Establishments: 300 Small Businesses

According to New York State licensing data, as well as data from the Steuben County Department of Social Services, there are 300 regulated and legally-exempt early care and education establishments operating in Steuben County.ⁱ These include not-for-profit and for-profit child care centers, family and group family child care homes,ⁱⁱ school-age child care programs, and targeted programs such as Head Start and state funded Pre-Kindergarten (Pre-K).ⁱⁱⁱ Family-based programs – both regulated and legally-exempt – are small businesses located in private homes and comprise 85 percent of all early care and education establishments in Steuben County [Figure 1].

Workforce: Over 950 Employees

In Steuben County, more than 950^{iv} individuals work within the early care and education sector, making the sector a significant employer. Jobs within the sector include teachers, teachers' aides, center directors, administrators, janitors and other support staff [Figure 2]. Collectively, these workers earn over \$16.2 million annually.^v This money is primarily spent locally, supporting other local industries as well as the larger regional economy.

Figure 1.
Early Care and Education
Establishments, Steuben County

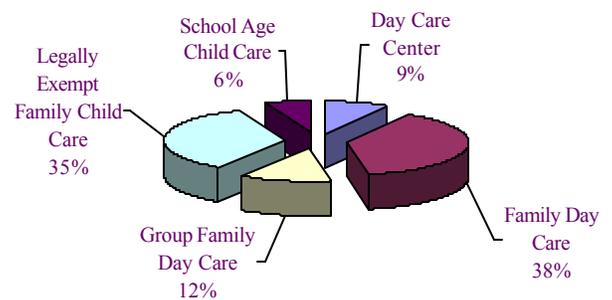
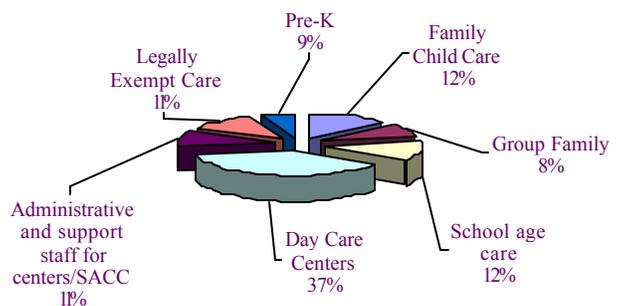
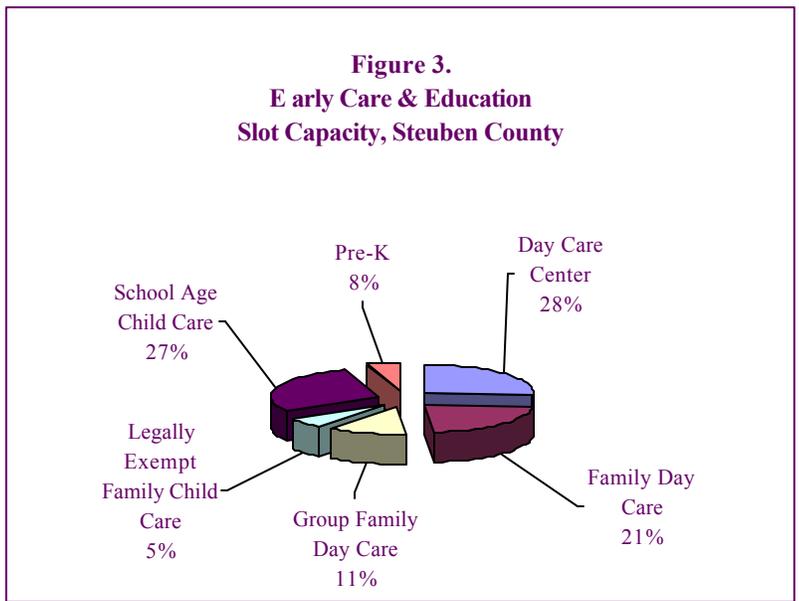


Figure 2.
Early Care and Education
Employees, Steuben County



Children: Over 4,400 Served from Birth to Age Twelve

Approximately 4,400 children living in Steuben County attend early care and education programs.^{vi} Though the majority of child care businesses are home-based, only 37 percent of all children are cared for in these establishments. Sixty-three percent of children are cared for in either a child care center or a community/school-based after-school program. [Figure 3]. It is important to note, however, that these numbers under-represent the children in care because they reflect only regulated and legally-exempt capacity documented by the Office of Children and Family Services and the Steuben County Department of Social Services. The early care and education sector also includes arrangements such as paid care provided by relatives, neighbors and nannies. These informal arrangements are not included in our estimates because comprehensive data on their scope is not available.

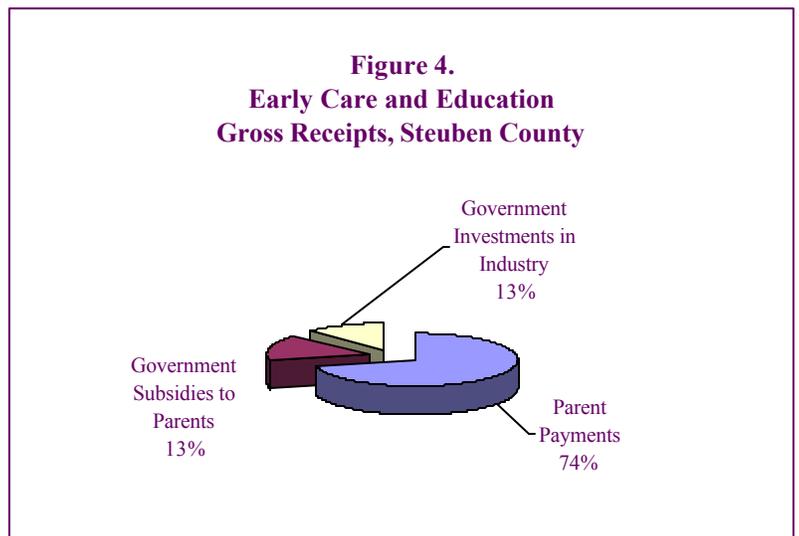


Families: Supporting 3,700 Working Parents

Quality early care and education programs are critical to the well being of working families. Early care and education programs support working parents by allowing them to be more productive knowing that their children are safe and thriving. In Steuben County, over 3,700^{vii} working parents have children who attend early care and education programs. With an average salary of \$31,315, these parents collectively earn more than \$117.4 million annually,^{viii} fueling Steuben’s economy through their productivity and consumption of local goods and services.

Gross Receipts: A \$30.8 Million Dollar Industry

The early care and education sector in Steuben County generates over \$30.8 million in gross receipts.^{ix} Gross receipts are comprised of parent tuition^x, government subsidies^{xi} and government funded industry supports.^{xii} Government subsidies help low-income parents pay for care. Government-funded industry supports include start-up grants for new child care programs, funding for the Child and Adult Care Food Program (CACFP), State University of New York and City University of New York child care programs, and several other quality initiatives. It is worth noting that tuition accounts for only 35 percent of total costs for higher education^{xiii}, whereas parents in Steuben County pay 74 percent of the costs of early care and education programs [Figure 4].

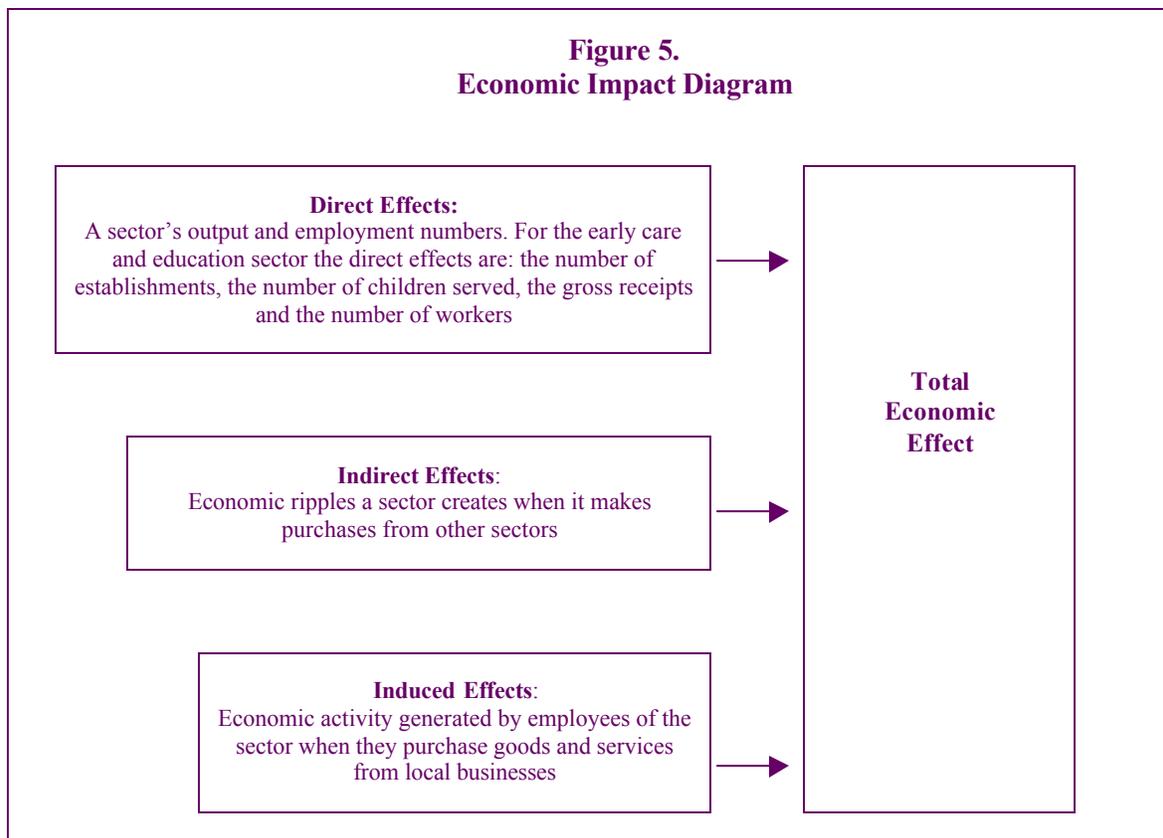


Early Care and Education Spending Ripples Through the Steuben Economy

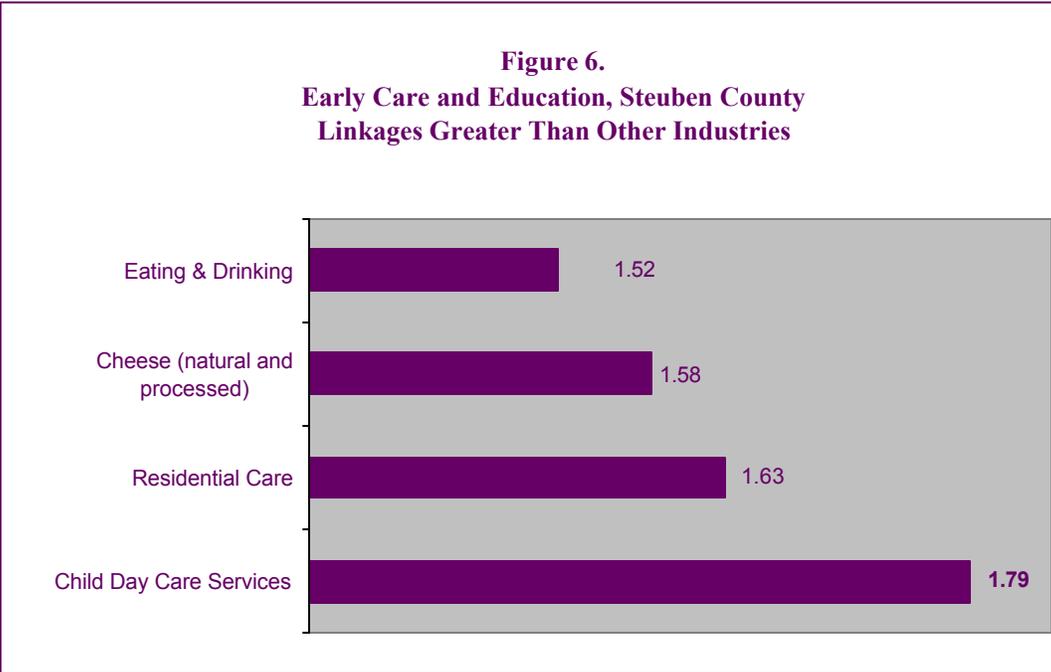
The importance of Steuben County’s early care and education industry extends beyond the number of individuals employed and the revenue of the industry, which is its “direct effect.” Like all other businesses, early care and education establishments and their workers spend money in their communities. As money circulates between industries in the regional economy, it stimulates economic activity. These activities are considered “ripples” in the regional economic pond and economists refer to this as the “linkage effect” [Figure 5].

There are two types of linkage effects:

1. Indirect effects measure the activity that the industry creates within the economy when it makes purchases from other sectors. For example, when early care and education businesses purchase toys and furniture, they stimulate demand in the retail and manufacturing sectors.
2. Induced effects capture the impact of the wages spent by early care and education workers for goods and services. For example, workers spend money on groceries, clothing, housing, and so forth, generating demand in other local industries.



The standard method that economic development professionals use to estimate the regional economic linkage of an industry is called input-output analysis. Input-output analysis calculates the indirect and induced effects that result from spending by a specific industry. Because most purchases by the early care and education sector are made locally, the sector has a strong linkage effect within the local economy. The stronger the linkage effect, the larger the output multiplier defined by



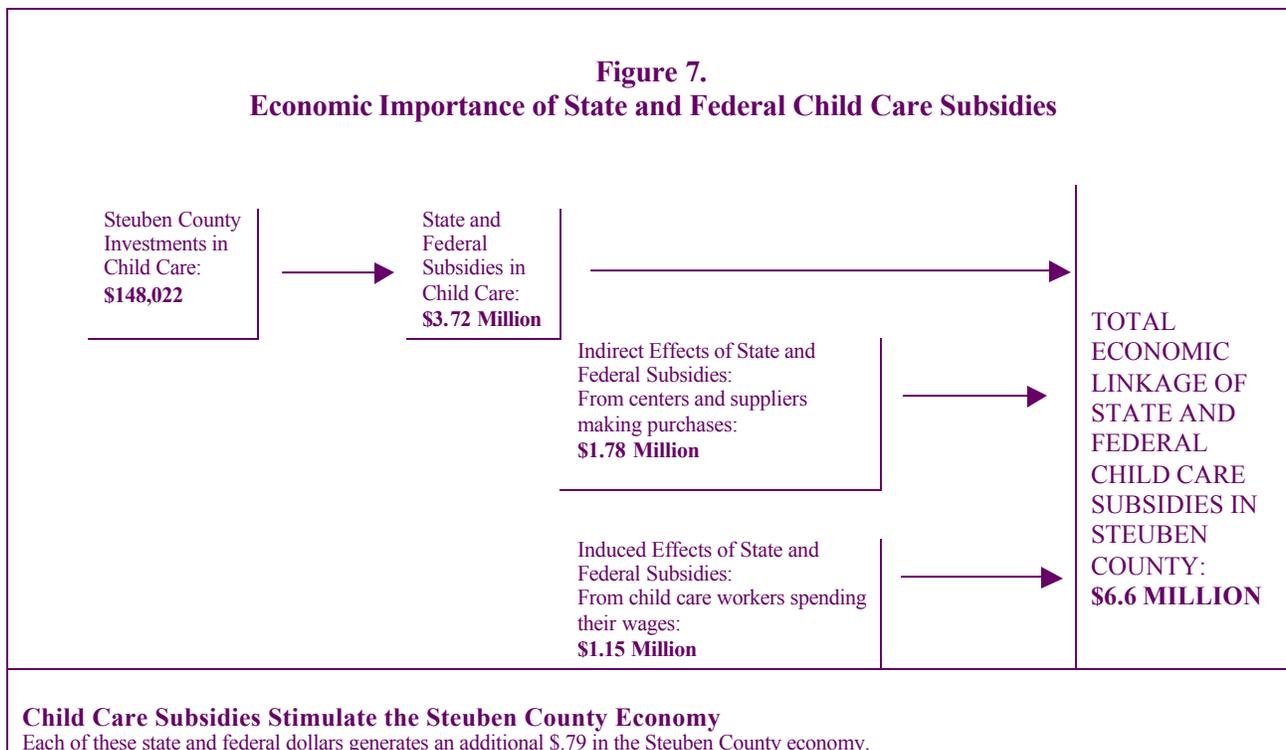
IMPLAN, the input-output modeling software used for this analysis. A statewide report conducted by Cornell University for the New York State Child Care Coordinating Council in 2004 found that the early care and education sector’s linkage effect in the state economy is higher than many other sectors that receive significant economic development support such as hotels and lodging, job training and local interurban transit. The sector’s linkage effect in Steuben County is higher than sectors such as eating and drinking, cheese (natural and processed) and residential care [Figure 6].^{xiv}

Impact of Government Investment

Funding that comes from the federal and state child care block grant is used to help low-income families pay for early care and education tuition. This, in turn, allows these families to stay employed, and these subsidies become part of a comprehensive economic development strategy. Input-output analysis can be used to measure the economic impact of government subsidies for this sector.

In 2005-06, Steuben County invested over \$148,000 local dollars to help low-income families pay for tuition for early care and education programs.^{xv} In turn, this local investment in the early care and education sector allowed Steuben County to leverage (i.e. draw down) \$3.72 million state and federal dollars – about \$25 dollars for every local dollar invested.^{xvi} Each state and federal dollar stimulates an additional \$.79 in the broader Steuben regional economy.^{xvii}

The estimated total economic impact of these federal and state child care dollars in Steuben County was \$6.66 million [Figure 7].



Investment in Early Care and Education Benefits Everyone

This report highlights the short-term impact of early care and education on the economy in Steuben County. But there are long-term benefits as well. Quality early care and education gives children the learning opportunities they need to be successful in school and in life. What a child learns in the first years of life affects brain development and future learning potential. Investing in children now by supporting high quality early care and learning 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.^{xviii}

Economists Arthur J. Rolnick and Rob Gruenwald of the Federal Reserve have investigated the long-term return on investments of quality early care and education from an economic development standpoint.^{xix} Their analysis suggests that there is a significant rate of return for society when it invests in its children.

“ 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 Gruenwald

In addition, according to a 2006 Cornell University survey of chambers of commerce and economic development leaders in New York State, eight out of ten respondents believed that early care and education should be a part of economic development policy.^{xx} Investing in quality early care and education in Steuben County will benefit our businesses, our workforce, our children and, ultimately, our future.

Endnotes

ⁱ State licensing data divides establishments into four modalities: Child Care Centers, Family Child Care, Group Family Child Care, and After School Care. Data from the state licensing was obtained using CCFS in August 2006. In addition to licensed care, Shirley Herrick, from the Steuben Child Care Project provided the number of legally exempt providers documented by the county. **Establishment** numbers include: **Day Care Centers** (26) + **Family Child Care** (116) + **Group Family Child Care** (36) + **Legally Exempt Care** (104) + **School Age Care** (18) = 300.

ⁱⁱ Family based care includes family and group family care. 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. 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.

ⁱⁱⁱ There are Pre-Kindergarten slots within the 300 early care and education establishments. However, not all Pre-K slots are in programs licensed by OCFS; some slots are in public schools, which are overseen by the New York State Department of Education.

^{iv} Employee numbers include: **Family Providers** (estimating one staff per establishment = 116) + **Group Family Providers** (estimating two staff people per establishment = 72) + **School Age Care** (estimating a ratio of 1:10 = 119) + **Day Care Centers: Staff** (estimating a ratio of 1:5 and additional .38 FTE for every one full time employee because most centers stay open from 7 am to 6pm = 352) + **Administrative and support staff for centers and school age care** (estimating ratios from retention data that indicate there is .23 non-direct care staff person for each direct care employee = 108) + **Legally Exempt Providers** (estimating one staff per establishment = 104) + **Pre-K** (estimating a 1:4 ratio in these classrooms = 86).

^v Average employee salary = State Average \$16,970 x Number of employees (957) = \$16.2 million

^{vi} The estimate for licensed care capacity was derived using state licensing data and was collected August 2006. These estimates document capacity, not actual enrollment rates, and if vacancies are large, may be a slight overestimate. This data reports the capacity, broken down by modality as: **Centers** (1,276), **Family Day Care** (927), **Group Family** (502), and **School Age Care** (1,191). In addition, Steuben County Department of Social Services supplied the documented capacity for **legally-exempt care** (244) and State Education Department documented the number of children enrolled in **Pre-K** but not already counted in state licensing data (342). (<http://www.emsc.nysed.gov/nyc/upk.html>)

Total licensed capacity = 4,482

^{vii} In order to find the number of working parents in Steuben County Census data was collected to find the number of children living in families and subfamilies with one single parent and two parents (in dual parent families) in the labor force. This number was then divided by the average number of children per family to determine the ratio of children to working parents (children per family=1.4). This ratio was then applied to the number of child care slots found in Steuben County to determine the number of working parents associated with children estimated to be using regulated slots. (Total number of Steuben County working parents associated with children in paid regulated care = 3,749) All Census data used comes from Summary File 3 (SF3) and can be downloaded from American Fact Finder: <http://factfinder.census.gov/>. This report used SF3 tables P46 and P15. The methodology noted above was demonstrated in the following report:

Ribeiro, Rosaria and Mildred Warner, Ph.D. 2004. *Measuring the Regional Economic Importance of Early Child Care and Education: The Cornell Methodology Guide*. Ithaca, NY: Cornell University Department of City and Regional Planning.

^{viii} Parents Annual Salary- Number of Working Parents in Steuben County (3,749) x Average Southern Tier Wage (\$31,315) = \$117.4 million

^{ix} Gross receipts = private parent tuition (total parent tuition – subsidy) + government subsidy + government funded industry supports.

^x In order to calculate parent tuition receipts a formula using capacity numbers retrieved from the state licensing data and a cost of care by age and modality were used. Following is the detail formula used for each modality. **Center Care:** [For Infants, Toddlers, and Pre-Kindergarten center care] Weekly Cost of Full-time Care by Age x Capacity by Age x 52 weeks (\$151 x 1,097 x 52 = \$8.3 Million) + [For School Age center care] Part-time School Age cost x Total Capacity x 40 weeks (a full school year) (\$105 x 179 x 40 = 751,800) + Full-time School Age Cost x Total Capacity x 12 weeks (summer time care) (\$130 x 179 x 12 = 279,240) **Center Care= \$6.7 million + 751,800 + 279,240 = \$9.34 Million**

Family Day Care: Weekly Average Cost of Care all Age Brackets x Total Capacity x 52 weeks

Family Day Care= \$129 x 927 x 52 = **\$6.20 million**

Group Family Day Care: Weekly Average Cost of Care all Age Brackets x Total Capacity x 52 weeks

Group Family Day Care= \$129 x 502 x 52 = **\$3.36 million**

Legally Exempt Care: Weekly Average Cost of Care all Age Brackets x Total Capacity x 52

Legally Exempt Care= \$91 x 244 x 52 = **\$1.14 million**

School Age Programs: Part-time cost x Total Capacity x 40 weeks (a full school year) (\$105 x 1,191 x 40 = \$5.00 million) + Full-time cost x total capacity x 12 weeks (summer time care) (\$130 x 1,191 x 12 = \$1.85 million)

School Age Programs= 5.00 million + 1.85 million= **\$6.85 million**

Total parent tuition = Center Care (\$9.34 million) + Family Day Care (\$6.20 million) + Group Family Day Care (\$3.36 million) Legally Exempt Care (\$1.14 million) + School Age Care (\$6.85 million) = \$26.9 million

^{xi} **Government Subsidy:** Total Government Subsidy = Child Care Block Grant allocation (\$3.72 million)

^{xii} **Government Industry Support** which includes: CACFP (\$120,840) + Head Start (\$2.94 million) + UPK (\$796,420) Total Start Up/Health and Safety (\$22,192).

Total Government Industry Support = \$3.8 million

^{xiii} Mitchell, Anne, Louise Stoney, and Harriet Dichter (2001). *Financing Child Care in the United States: An Expanded Catalog of Current Strategies, 2001 Edition*. Kansas City,

MO: E.M. Kaufman Foundation. Available at: http://www.emkf.org/youth_development/childcare2001/index.cfm

^{xiv} The IMPLAN code and SIC crossover codes can be found at the Minnesota IMPLAN Group Inc. website available at: <http://www.implan.com/kb/question.php?qrstId=228>.

Detailed SIC definitions for the sectors can be available at: Occupation Safety and Health Administration, US Department of Labor available at http://www.osha.gov/pls/imis/sic_manual.html The following are the IMPLAN Codes for each sector noted: IMPLAN Numbers: 499 (Child Care), 62 (Cheese, natural and processed), 501 (Residential Care), 454 (Eating & Drinking).

^{xv} **Local dollars** = state required **Maintenance of Effort (MOE)** dollars (\$148,022). In 2005-06 Steuben County is expected to receive its \$3.72 million CCBG allocation as a result of meeting county required **MOE**. *Additional local funds* invested toward child care would not effect the county's CCBG allocation.

^{xvi} Steuben County local Maintenance of Effort (MOE) share was \$148,022 which leveraged (drew down) \$3.72 million in child care block grant dollars. Ratio: \$3,721,857

\$148,022 = \$25.14; i.e., for every \$1 the county invested, it received \$25.

^{xvii} Source: IMP LAN analysis conducted by Cornell University for NYSCCC in 2004. Medium metros Steuben/Chemung Type II Multiplier: indirect effect (.48) + induced effect (.31) = .79.

^{xviii} Lynch, Robert G., *Exceptional Returns: Economic, Fiscal and Social Benefits of Investment in Early Childhood Development*, Economic Policy Institute, 2004.

^{xix} Rolnick, Art and Rob Gruenwald, (2003) "Early Childhood Development: Economic Development with a High Public Return," available at <http://milmeapo.lisfed.org/pubs/fedgaz/03/03/earlychild.pdf>.

^{xx} Warner, M.E., Kristen Anderson and George Haddow, 2007. "Putting Child Care in the Picture: Why this service is a critical part of community infrastructure," *Planning*, (June 2007): 16-19.