THE PRICE OF QUALITY

Estimating the Cost of a Higher Quality Early Childhood Care and Education System for Southeast Wisconsin

Public Policy Forum

moving the region forward

ABOUT THE PUBLIC POLICY FORUM

The Milwaukee-based Public Policy Forum – which was established in 1913 as a local government watchdog – is a nonpartisan, nonprofit organization dedicated to enhancing the effectiveness of government and the development of southeastern Wisconsin through objective research of regional public policy issues.

PREFACE AND ACKNOWLEDGMENTS

This report was undertaken to provide citizens and policymakers in the Milwaukee region with a comprehensive understanding of the economic impact of the child care industry in Southeast Wisconsin. We hope that policymakers and community leaders will use the report's findings to inform discussions during upcoming policy debates and deliberations regarding early childhood care and education programs and policies in our region.

Thanks goes to members of our early childhood education advisory committee and other key informants, who have provided valuable input and advice for this research.

We also wish to acknowledge the funders of this research: the Brico Fund, the Greater Milwaukee Foundation, the Richard and Ethel Herzfeld Foundation, the Faye McBeath Foundation, Rockwell Automation, and the Richard Weiss family foundation, all of Milwaukee, as well as The Buffett Early Childhood Fund of Omaha and The Joyce Foundation of Chicago.

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EXECUTIVE SUMMARY

Throughout the United States, investments in high-quality early childhood education are seen by community leaders as a strategy for improving outcomes in areas such as K-12 education, workforce development, and economic development. Indeed, many research studies conclude that high quality early learning environments produce social, educational, and economic benefits for children and the communities in which they live. As a result, many state and local governments around the country are seeking to capture these benefits by investing in quality improvement efforts. Wisconsin is no different; the 2009-2010 state biennial budget calls for the Department of Children and Families to create a strategy for improving the quality of publicly-subsidized child care.

While policymakers increasingly are looking to maximize the benefits of high-quality early childhood education, budget realities often dictate that they do so while minimizing the expenditure of public funds. Thus, this report seeks to inform these decisions in Wisconsin by estimating the costs of achieving improved quality in child care and early learning programs in southeast Wisconsin and analyzing policy options associated with quality improvement initiatives.

Direct Service Costs

We start by estimating the direct costs of operating early childhood care and education programs in the southeast Wisconsin region. These costs, mostly comprised of labor costs, currently amount to an estimated $370.5 million annually. Better-quality care and early learning programs would require an estimated $506.2 million in annual operating costs. Under a high-quality scenario, we estimate the annual direct service costs would be $671.4 million. See Table I.

Direct service costs are borne mostly by parents, who pay tuition or fees; by providers; and by state government, to the extent it subsidizes low-income families' costs.

Table I. Estimated Annual Direct Service Costs for Southeast Wisconsin	
Total Current Direct Service Cost	$370.5 million
Total Better-Quality Direct Service Cost	$506.2 million
Total High-Quality Direct Service Cost	$671.4 million

Infrastructure Costs

Next, we examine the total infrastructure costs associated with regulating and enforcing quality improvements. These costs, which would accrue regardless of which level of quality improvement is sought, include technical assistance and professional development for individual programs and teachers; rating, monitoring, and assuring the quality of programs; evaluating the effectiveness of quality improvement policies; and governing the agencies that undertake these regulatory and other activities.

Table II summarizes the various categories of annual infrastructure costs during the initial year of implementation of a quality improvement policy initiative. In total, these costs are estimated to be at least $7.4 million in that year.

Infrastructure costs are borne mostly by government, although private sector philanthropists could have a role in funding technical assistance, professional development, and evaluation.

Table II. Initial Infrastructure Cost Estimates	
Technical Assistance	$3 million
Monitoring and Quality Assurance	$1.2 million
Professional Development	*
Evaluation and Assessment	$3 million
Governance	$229,000

**Professional development costs are not estimated in this analysis, due to lack of data.*

Policy Options

With these cost estimates in mind, we analyze several policy options, recognizing that the greatest long-term economic and social benefits derive from highest-quality care and early learning.

The available policy options can be placed along a spectrum ranging from low-investment/low-return to high-investment/high-return. Table III on the next page summarizes the policy options, including the probable impacts of each option on the supply and demand for high-quality programs. Whether the policy might affect the entire child care and early learning industry or target a certain population of children or providers is also highlighted.

The options include:

- **Maintaining the status quo of the state's current rules and regulations regarding child care quality.** This option would presumably cost taxpayers no more than is currently spent and would have no impact on quality.
- **Taking an incremental approach to quality improvements, by regulating specific aspects of care or caregiver training.** This modest-cost option could improve quality for many children across the region, but would not reform the system in a way that would maximize the potential benefits.
- **Implementing a Quality Rating and Improvement System.** By providing fiscal incentives for child care providers who serve subsidized families to improve quality, this option could result in higher quality across the region and could be structured such that cost increases are low or do not occur. This type of rating scale program would not be expected to maximize benefits until most child care providers have received best-quality ratings.
- **Targeting quality improvement policies to certain populations of children or providers.** Because the benefits of high-quality early childhood education are greatest for the most disadvantaged children, a targeted policy aimed at maximizing the quality of care for low-income or otherwise at-risk children could reap large benefits. Costs would be dependent on the size of the population targeted.
- **Reforming the entire system to require high quality in all programs.** This would be the most costly option, yet would impact the most children and would maximize the benefits across the region.

Table III. Comparison of Policy Options					
	1. Maintain Status Quo	**2. Incremental Improvement**	**3. Quality Rating & Improvement**	**4. Targeted Intervention**	**5. Maximize Quality**
Realign market forces to incentivize quality	No.	No.	Yes. Creates informed consumers; especially incentivizes quality if policy features tiered reimbursement.	Potentially, but no effect is likely if merely a few model programs are the result.	Yes.
Impact quality across entire marketplace	No.	Yes.	Potentially, may result in greater parental demand for quality.	Not likely.	Yes.
Maximize long-term social and economic benefits	No.	No.	Not likely, but could occur over time if most programs became highly rated.	Not on a wide scale, but individual model programs could generate such benefits.	Yes.
Cost to government	Same as current.	Medium.	Will vary with design, ranging from same to high.	Will vary with design, ranging from medium to high.	High.
Estimated cost per-pupil to run a program (for centers)	$5,625	$8,023	Dependent on whether the goal is to make incremental improvement or maximize quality.	Dependent on whether the goal is to make incremental improvement or maximize quality.	$10,958

Financing Models

As several of the policy options require an increased investment from state and/or local government, we also analyze models for financing quality improvement policies. There are five financing models most often used in other states, any of which could be used here in Wisconsin:

- **Earmarked revenues:** Earmarked revenues set aside a portion of existing general or special purpose revenues. Most often it is sales or income tax revenues that are earmarked at the state level and property or sales taxes that are earmarked at the local level.
- **Dedicated taxes or fees:** Dedicated fees and taxes are levied specifically to create a new revenue stream for early learning efforts. At the state level these are often sin taxes, while at the local level they may be fees assessed on a particular activity, such as registering a car.
- **Voluntary taxes or fees:** Voluntary taxes or fees are often assessed on gambling activities such as the lottery or casino gaming. Other common voluntary revenue streams come from donations generated by tax return check-offs or special license plates.
- **Tax credits or deductions**: Income tax credits and deductions can only be enacted at the state level. These credits or deductions may be designed to apply to either individual or corporate income tax.

- **Endowment or trust fund:** Many states have created endowments or trust funds to generate interest income that can be used to fund early learning initiatives. These funds can be created with public dollars, private dollars, or a combination of both and can be created at the state or local level.

This report is not intended to endorse any particular way in which state or local government should consider investing in early childhood care and education or the size of any such investment. It is intended to demonstrate that the costs of such an investment can be tailored to the desired outcomes and that there are positives and negatives to each policy option. Policymakers and their partners, the private sector and the public, must weigh the desired benefits with the costs and determine the most effective and efficient way to reap better outcomes for the region's children and economy.

Notice of Correction

January 4, 2010

This revised edition contains corrected figures that differ from the original December 2009 report.

In the original report, a calculation error appeared in the last column of the table in Appendix 3 regarding worker's compensation. The corrected estimates, as reflected in this revised edition, are $4,567 for worker's compensation for the high-quality group child care centers; $832,798 for total direct service costs for high-quality group child care centers; and $10,958 in per-child costs for high-quality group child care.

INTRODUCTION

Consensus is growing that the quality of early childhood care and education contributes a great deal to regional economic health, and that the current quality of care in southeast Wisconsin is too low. Research has linked high-quality care with benefits accruing to children, such as improved school readiness; parents, such as higher productivity while at work; society, such as healthier, more successful families; government, from cost savings associated with less demand on safety net services and the justice system; and the economy, from higher wage earners. In light of this research, and a renewed focus on the need for greatly enhanced oversight of Wisconsin's publicly-subsidized system of child care, it is evident that early childhood education policy will receive significant attention from policymakers in the months ahead.

This report is designed to provide context for upcoming policy debates by estimating both the per-child costs of the current child care/early learning system in southeast Wisconsin and a hypothetical "highest-quality" system serving the same children. In addition to estimating these two extremes of the quality spectrum, we give policymakers a sense of a potential middle ground, by estimating the per-child cost of a "better-quality" system that is somewhere in the center of the spectrum.

We also itemize cost drivers (i.e. wages, regulatory oversight, and technical assistance) so that the cost of targeted quality-improvement efforts can be determined, should targeted policies be preferred over systemic efforts.

As for the benefits, we highlight the vast body of social science and economic research that tabulates the long- and short-term benefits of high quality early childhood education. The fact that maximum benefits can be expected only from maximum quality has implications for the cost-effectiveness and political feasibility of policy changes. In addition, different benefits accrue to individuals, to society at large, and to the government. This report differentiates between those various types of benefits and their primary beneficiaries.

In the final section of the report, several policy options are analyzed and placed along a spectrum ranging from low-investment/low-return to high-investment/high-return. By ordering the policy options in this way, we hope to provide policymakers with a range of options that can be considered in the context of both affordability and effectiveness.

THE POTENTIAL BENEFITS OF HIGH-QUALITY EARLY CHILDHOOD EDUCATION

A growing body of research literature shows that high-quality early childhood care and education may be one of the best economic development investments a local or state government can make. The general consensus among researchers is that high-quality early childhood programming can result in better school readiness, both academically and socially. This foundation is then likely to result in better long-term outcomes, including higher wages, lower crime, and healthier families. For impoverished or disadvantaged children, the benefits have been shown to be even greater.

There are short-term benefits as well. The child care industry employs thousands of individuals and boosts the regional economy. Child care also supports working parents, and quality care can improve productivity among these parents.

The research also demonstrates, however, that the most significant long-term benefits have been found to accrue only from high-quality care. Mediocre or low-quality care may have some short-term benefits, but does not result in the same return on investment as higher quality care.

What is "High Quality?"

Definitions of high-quality early care and education vary, but such care often features many of the following characteristics:

- Teachers with four-year college degrees in early childhood education; assistant teachers with two-year degrees.
- Teachers and assistant teachers are well-compensated and have ongoing professional development opportunities (which results in low staff turnover).
- Smaller teacher-child ratios.
- For three- and four-year olds, use of a professionally developed prekindergarten curriculum.
- Interventions with family units such as supportive home visits.
- Monitoring and site visits by either government or accrediting agency.

Source: Lynch (2007) and Public Policy Forum review of relevant academic literature.

For purposes of this report, high-quality early childhood education is defined as those programs or providers who have the characteristics delineated in the box on this page. We define early childhood education and early learning to include child care provided outside the child's home, either in a group setting or in the provider's home; Head Start and Early Head Start programs; and private preschool. Our estimates do not include preschool or four-year-old Kindergarten provided by a public school district.

Return on Investment

The notion that high-quality early childhood education can provide a return on investment arose from the work of economists who analyzed social science research on the relationships between high-quality early learning environments and certain individual or societal benefits. Table 1, on the following page, summarizes most of the peer-reviewed studies that have been conducted over the past 40 years and the types of benefits that have been found to be related to high-quality programs. For example, of 13 longitudinal studies following children over time, nine have found statistically significant relationships between high-quality early childhood education and educational benefits such as student achievement or high school graduation. The table indicates both the breadth of benefits investigated by researchers and the variety of analyses utilized.[1]

Benefits of High Quality

The benefits that have been found from high-quality early childhood education include:

For children

- Higher school readiness
- Improved cognitive ability/higher IQ
- Improved social skills
- Lower use of special education classes
- Lower rates of grade retention (being held back a grade)
- Higher standardized test scores in early grades
- Higher labor force participation
- Higher high school graduation rates and educational achievement
- Lower use of welfare
- Higher wages earned and therefore higher tax contributions
- Lower juvenile delinquency and lifetime participation in crime
- Lower rates of teen pregnancy and out-of-wedlock births

For parents

- Improved parenting skills
- Improved ability to find and keep work
- Higher wages

For research studies, see: www.publicpolicyforum.org/Matrix.htm

[1] For a more detailed version of Table 1, including hyperlinks to the studies themselves, visit www.publicpolicyforum.org/Matrix.htm

Table 1. Number of peer-reviewed studies with statistically significant findings by type of benefit found

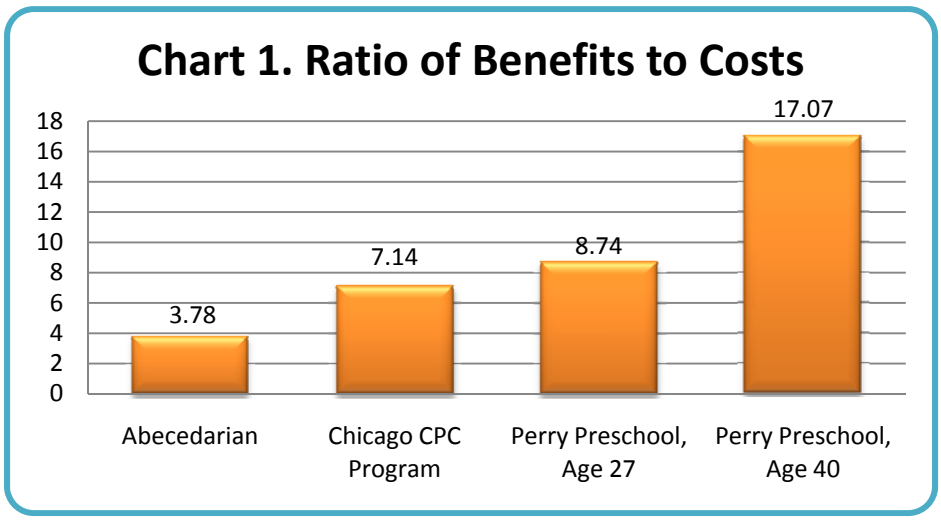
	Cognitive	Behavioral	Sociability	Educational	External Benefits to Society
	(IQ)	(delinquency, crime)	(teacher and parent ratings)	(achievement, high school graduation, special education, grade retention)	(reduced welfare use, greater incomes and more taxes generated)
Type of Research					
Longitudinal Studies (out of 13)	10	6*	4*	9	6
Reviews and Meta-Analyses (out of 9)	9	6	6	7	4
Cross-Sectional Studies (out of 4)	3	2	3*	2	1

**One of these studies found an inverse relationship.*

Three studies in particular are often cited as evidence of the benefits of high-quality early childhood programs and have received the most attention from economists. These studies, described in detail in Appendix 1, have tracked children over decades, allowing the various types of benefits to be quantified and enabling economists to calculate a return on investment. This is estimated by determining whether the long-term cost-savings to society from producing children who grow up with these benefits outweigh the costs of starting and operating the preschool programs. The cost-savings can be estimated per child; for example, the average high school dropout recently was found to cost taxpayers more than $292,000 in lower tax revenues, higher cash and in-kind transfer costs, and imposed incarceration costs compared to the average high school graduate.[2]

Chart 1, on the following page, illustrates the ratios of benefits to costs that economists have determined for each of the three longitudinal studies. A ratio greater than 1:1 indicates a positive return on investment.

[2] Sum, Andrew, Ishwar Khatiwada, Joseph McLaughlin, with Sheila Palma. October 2009. *The Consequences of Dropping Out of High School.* Center for Labor Market Studies, Northeastern University, Boston, Mass.



Source: Lynch, Robert G. (2007). *Enriching Children, Enriching the Nation: Public Investment in High-Quality Prekindergarten*. Economic Policy Institute: Washington, D.C. (p. 19)

The short-term economic benefits of child care and early learning programs depend less on quality. These benefits are those that accrue to the regional economy as a result of child care operating as an industry: employing people, purchasing from vendors, and providing a service. The Forum estimated these benefits for southeastern Wisconsin in a report issued earlier this year.[3] We found that southeastern Wisconsin's child care industry employs roughly 12,400 people and sustains approximately 7,000 other non-child care jobs in the region in related industries. The region's child care industry generates an estimated $661 million in gross receipts annually and another $648 million is produced in sales in other, related industries. In addition, we estimate the region's child care industry enables over 15,900 parents of children under age six to work and earn an estimated $742 million annually.

The Rationale for Public Sector Involvement

Often, the research cited above is relied on as reason enough to justify a strong government role in improving the quality of child care and early learning. But other rationales also can come into play, including an argument centering on the atypical market forces operating in the child care marketplace. In a well-functioning market, consumers are informed about the quality of the product and would be expected to pay more for a higher-quality product. In the child care market, however, research shows parents have little information about the educational quality of the care they are purchasing. In addition, the cost of high-quality care is too great for most parents. Thus, there is little demand for highest-quality care, and child care providers have little financial incentive to increase the educational quality of their services. This dynamic provides a rationale for government intervention to either subsidize or regulate quality in light of its demonstrated economic, educational, and societal benefits.

[3] Public Policy Forum. (May 2009.) "The Economic Impact of the Early Childhood Education Industry in Southeast Wisconsin." http://www.publicpolicyforum.org/pdfs/ECEBenefits.pdf

A public sector role in improving the quality of early childhood education also can be supported by the pragmatic argument that state government already plays a role in the child care market by regulating child care providers to ensure the safety and health of the children in care and by subsidizing child care costs for low-income working families. Because hundreds of millions of taxpayer dollars are being spent in this way, some reason that these same dollars could be used to provide incentives to improve quality. Of course, if such an incentive was in place, the government's role likely would be expanded to include regulation of quality.

Finally, the federal government recently provided another justification for policy initiatives focused on quality by providing financial incentives for state and local governments to improve child care quality.

Despite these justifications, government has not played a major role in encouraging high-quality care in southeast Wisconsin. One likely reason is because the costs and benefits of high-quality early childhood education are not often reflected on the same balance sheet.

Currently, the costs of high-quality care and early learning accrue mostly to child care providers and parents, while the benefits accrue more broadly across society. In addition, the long-term social benefits are remote, while the short-term economic benefits accrue regardless of quality. Unfortunately, government often refrains from making investments unless the benefits to taxpayers are either immediate or easily quantified. In addition, the government agency responsible for making the investment is likely to do so only if it can also claim at least some of the benefits. With potential benefits as diverse as reduced criminality, reduced reliance on welfare, and higher educational achievement, for example, matching early learning's investors with its beneficiaries is challenging.

In the sections that follow we aim to construct accurate and realistic estimates of the costs of possible policies designed to improve the quality of early learning. With both these costs and the potential benefits in mind, the region's policymakers, parents, and taxpayers can debate not only the merits of higher-quality early childhood care and education, but its affordability as well. The final section of this report arrays several policy options in such a way as to encourage those engaged in the debate to find consensus on the best way to maximize tomorrow's benefits with actions that can be taken today.

DATA AND METHODOLOGY

The Institute for Women's Policy Analysis (IWPR) developed a step-by-step methodology for estimating the cost of providing high-quality universal preschool statewide. That methodology, specified in *The Price of School Readiness: A Tool for Estimating the Cost of Universal Preschool in the States,*[4] was adapted to estimate the cost of quality enhancements to early childhood care and education in southeastern Wisconsin.

Of course, underlying an estimate of quality improvement costs is an assumption that the quality of care and early learning programs in the region is low. Because there is not much direct evidence of the current quality of care, the assumption is based on two sources of data. First, there are few child care or early learning programs in the region that are accredited by either the National Association for the Education of the Young Child (NAEYC) or the National Association for Family Child Care. Of the 3,552[5] licensed or certified child care providers in the seven-county region, 56 are accredited by NAEYC[6] and five by NAFCC.[7]

In addition, research by the Wisconsin Child Care Research Partnership has found that the majority of Wisconsin's child care providers are of mediocre quality.[8] These findings, which represent the only research in the state based on observations of providers, categorize child care providers as being of low, mediocre, good, or highest quality. Only 15% of providers in Wisconsin fall into the highest quality category ("good" or "excellent"), while 11% received scores of poor quality, described as "less than minimal." The majority of care, 74%, received "fair or mediocre" scores.[9]

The Wisconsin Child Care Research Partnership[10] also investigated the demographics of the children receiving care and determined, despite the fact that disadvantaged children show larger positive outcomes from high-quality early childhood care and education than children from middle- and upper-income families, that such children are less likely to receive high-quality care in Wisconsin:

> Higher levels of director education, greater numbers of teachers with associate's degrees or higher, and lower rates of staff turnover were associated with lower

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[4] Golin, Stacie Carolyn and Anne Mitchell. (2004.) *The Price of School Readiness: A Tool for Estimating the Cost of Universal Preschool in the States*, Institute for Women's Policy Research. http://www.iwpr.org/pdf/G713.pdf (After this point, referred to as the "IWPR methodology".)

[5] Public Policy Forum. (May 2009.) "The Economic Impact of the Early Childhood Education Industry in Southeast Wisconsin." http://www.publicpolicyforum.org/pdfs/ECEBenefits.pdf

[6] Accessed November 9, 2009 from: http://www.naeyc.org/families/search, which is updated monthly.

[7] Accessed November 9, 2009 from: http://www.nafcc.org/accreditation/acclist5db.asp.

[8] Because 80 percent of WI programs provide care for subsidized children, the study's sample is fairly representative. Wisconsin Child Care Research Partnership. *Quality of subsidized child care in Wisconsin*. Issue Brief No. 6, 2002. http://www.sohe.wisc.edu/outreach/wccrp/pdfs/brief6.pdf

[9] See also: Edie, David, Diane Adams, David Riley, and Mary Roach. (Mar. 2003.) *Improving Child Care Quality*. WI Child Care Research Partnership, Report No. 2.

[10] Adams, Diane, Diana Durant, Dave Edie, Maureen Ittig, Dave Riley, Mary Roach, Stephanie Welsh, Deb Zeman. (2001.) *Trends Over Time: Wisconsin's Child Care Workforce.* WI Child Care Research Partnership, University of Wisconsin – Extension. http://www.sohe.wisc.edu/outreach/wccrp/pdfs/trends.pdf

> percentages of children on child care subsidies. These data suggest that the children who most need high-quality care may be the children least likely to receive it (p. 9).

The regional "system" of early childhood care and education for which we develop cost estimates is defined as all regulated child care providers, both family/home-style providers and group/center-based providers; Head Start and Early Head Start centers; and private preschools. Preschool or four-year-old Kindergarten provided by a public school district is not included in our estimated system. The children served by this system are those aged 0 through 5 years living in Milwaukee, Waukesha, Ozaukee, Washington, Racine, Walworth and Kenosha Counties with all available parents in the workforce.

Other assumptions and definitions are built into each step in the estimation. In an effort to be fully transparent, all assumptions are detailed in the appendices so that other parties who may wish to conduct similar calculations with similar or different assumptions may do so.

The methodology consists of three steps:

1. Estimating program need and participation (which can be found in Appendix 2);
2. Estimating direct service costs per child, including operations and material costs (Section 4);
3. Estimating total infrastructure costs, including technical assistance, monitoring and regulation, professional development, evaluation, and governance (Section 5).

Estimates are made twice: for a mid-point of better-than-current quality and also for a high-point of best quality. For some costs, the extent of quality improvements is irrelevant. For example, per-child material costs do not differ between the better quality and best quality estimates, as quality is driven by personnel factors more than classroom materials.

Data sets, which are detailed in the narrative and appendices, come from the following primary and secondary data sources:

- Public Policy Forum survey of child care providers in southeastern Wisconsin, June 2008.
- Public Policy Forum survey of parents in southeastern Wisconsin, April 2008.
- The Registry, a Wisconsin-based organization that agreed to share anonymous data with the Public Policy Forum regarding child care employee pay, 2009.
- Bureau of Labor Statistics, May 2007.
- Milwaukee Area Technical College, Graduate Report, 2008.
- WI Department of Children and Families, state employee salary estimates, 2009.

ESTIMATING DIRECT SERVICE COSTS

Economic models are a useful method of simplifying complex concepts or systems. We needed a way to gauge the cost of the current system, and to observe how that picture would change as quality increased. While the system contains a multitude of early childhood care and education providers, our modeling creates cost estimates only for an average child care center and an average family (or home-based) child care program. We have sought to be transparent about the assumptions on which our cost estimates are based by including detailed appendices.

What are direct service costs?

Direct service costs represent the general cost of providing the early childhood care and education programming, encompassing staff salaries and benefits, rent, consumable materials/supplies and food. The cost of broad system elements, such as monitoring and governance, will be covered in a different section.

The Institute for Women's Policy Research (IWPR) methodology recommends constructing proxy budgets for making estimations of direct service costs related to child care.[11] Direct service costs, as further explained in the text box at right, represent the general budget of running a child care program. By creating a before-reforms budget and an after-reforms budget for both family- and center-based child care arrangements, the cost of upgrading quality is revealed. In addition to the two (before and after) proxy budgets recommended by IWPR, this report also adds a proxy budget option representing reforms that are at a step between the current system and the highest-quality system. Thus, as shown in the text box titled "Proxy Budgets," this report has developed six total proxy budgets. For child care centers and family providers, we created a baseline, better-quality, and high-quality budget.

Proxy Budgets

CENTER-BASED PROVIDERS

- **Baseline** Budget
- **Better-Quality** Budget
- **High-Quality** Budget

FAMILY PROVIDERS

- **Baseline** Budget
- **Better-Quality** Budget
- **High-Quality** Budget

IWPR predicts that the main difference between the before- and after-reforms budgets will be the increased cost of compensating qualified teachers (i.e., personnel costs). They stress that this exercise is meant to capture the potential range of program costs and "is not intended as a mandate for program implementation" (p. 22).

[11] The proxy or "hypothetical child care setting" method was also recommended in a guide for calculating the cost of early childhood education developed by The Finance Project. Source: Stebbins, Helene and Barbara Hanson Langford. (May 2006). "A Guide to Calculating the Cost of Quality Early Care and Education." *Financing Strategies Series*, The Finance Project.

Table 2 shows the cost estimate categories that were used in each center-based proxy budget. The family provider proxy budgets were similar, but with fewer employees and a slightly different mandatory benefit structure. The proxy budgets cover salaries, benefits and non-personnel costs.

Table 2. Proxy Budget Cost Categories for Child Care Center
Salaries
Director
Administrative Assistant/Bookkeeper
Teachers
Assistant Teachers
Subtotal
Mandatory Benefits (% of Salary)
FICA (6.2%)
Medicare (1.45%)
FUTA (0.8%)
WI unemployment (3.25%)
Worker's Compensation (0.83%)
Subtotal
Other Benefits
Health Insurance
Dental Insurance
Pension
Subtotal
Total Personnel Costs
Personnel cost per child per year
Non-personnel (supplies, food, etc.)
$2,000 per child (x 76 children)
Subtotal
Total Direct Service Costs
Direct service cost per child per year

Non-personnel costs encompass rent, utilities, maintenance, food, educational supplies, training, office supplies, insurance, telephone, postage, advertising, fees/permits, and miscellaneous. It is difficult to accurately estimate non-personnel costs, which may vary according to the type and size of child care program. This report follows the IWPR methodology's recommendation that non-personnel costs amount to an estimated $2,000 per child per year.[12] Unlike other variables that will be described below, the non-personnel cost remains stable even as quality increases in the proxy budgets.

The full proxy budgets are presented as tables in appendices 3 and 4. Proxy budget narratives, with details on assumptions and how estimates were made, are included as appendices 5 and 6.

Rationale for Proxy Budgets

Longitudinal research has found that high-quality early childhood education can produce a variety of benefits which are beneficial to children and society, and which can provide substantial returns on investment through cost savings. The high-quality programs studied tended to have teachers with four-year college degrees, smaller-than-usual teacher-child ratios, a set educational curriculum, and interventions with the family units such as home visiting.

An important nuance of the research showing large long-term economic returns is that such returns are only produced by child care programs with very high quality. No state currently has a comprehensive early childhood system that is considered to be of such high quality as to generate high long-term economic benefits on a broad scale. However, many states, including Wisconsin, are taking steps to improve quality.

[12] IWPR's source for this figure: Mitchell, Anne W. (2002). "Expenditure Budget for Nonpersonnel Items in a Typical Center-based Child Care Program." Unpublished.

Consequently, in addition to outlining out current baseline system, this report aims to analyze the costs of two different tiers of quality:

- The "half-way to highest quality" proxy budget, which we call the "better-quality" budget to emphasize that it can be useful as a benchmark of progress on the way to realizing the highest-quality system. The better-quality budget may be useful because gradual policy reforms are more likely to represent political and economic realities. It must be recognized, however, that less investment in the system yields lower long-term economic returns.

- The high-quality proxy budgets will correspond to a system that would have the potential to generate the highest economic returns in the long-run. As noted repeatedly, these returns do require higher up-front costs.

The Registry

This section references The Registry a number of times, an organization that served as a resource in this work by sharing data with the Public Policy Forum on earnings of child care professionals (www.the-registry.org).

The Registry is Wisconsin's child care professional recognition system. The organization tracks and ranks child care workers according to their training and education. All licensed center staff in Wisconsin are required to register, which often involves submitting evidence of completed coursework. The Registry has developed a ranking system that defines various levels of child care expertise and experience. Staff who register are assigned a Registry level between one and 17, with one being entry-level work and 17 being doctoral-level work.

In addition to assigning rankings, The Registry awards the Administrator, Preschool, Infant Toddler, and Inclusion credentials in recognition of completed coursework.

Child Care Center Proxy Budgets

Child Care Center Baseline Budget

The first step in creating a proxy budget is to determine the number of staff for each type of program. The number of staff is based on how many children are served by the programs.

The before-reforms "baseline" budget, reflecting our current system, is based on Wisconsin child care licensing standards, especially with regard to teacher-child ratios. While the number of children served in a group child care center can vary widely, the proxy budgets model a center serving 76 children that is in compliance with licensing standards regarding staff-to-child ratios. To serve 76 children, budget modeling for a group child care center assumes ten teaching staff members, distributed as shown in

Table 3. The "Group Size Maximum" column in Table 4 refers to the maximum group sizes allowed by Wisconsin licensing standards. This model assumes staffing needs would be divided between five teachers and five assistant teachers (with a Director and Administrative Assistant/Bookkeeper rounding out the employees of the center).

Table 3: Staffing Numbers for Group Center Baseline Proxy Budget Based on WI Licensing Standard Requirements

Age of child	Group size maximum	Staff-child ratio	Children served	Teaching staff	Teachers	Assistant Teachers
Birth - 2	8	1:4	8	2	1	1
2-2.5 years	12	1:6	12	2	1	1
2.5-3 years	16	1:8	16	2	1	1
3-4 years	20	1:10	20	2	1	1
4-5 years	24	1:13	20	2	1	1
Total			**76**	**10**	**5**	**5**

The group center baseline proxy budget is based on estimates of the characteristics of an average 76-child program in the region. It includes a director holding or working toward the Wisconsin Child Care Administrator Credential[13] (level 10 on the Registry's career ladder). The director, receiving health insurance but no dental or pension benefits, is the only employee receiving benefits of any kind. This budget also includes an administrative assistant/bookkeeper, teachers (with high school diplomas or GEDs and a minimum of two non-credit courses in early childhood education), and assistant teachers (with high school diplomas or GEDs and one to two non-credit courses in early childhood education, depending on the age of children served). See Appendix 5 for a full description of employee qualifications[14].

The low level of benefits reflected in this proxy budget is representative of the results of the Public Policy Forum's 2008 Providers' Survey, which found less than 20% of child care providers offered any kind of health insurance.[15] Baseline wages were estimated using data shared by The Registry. In the seven-county metro area, 340 teachers reported wage data to The Registry showing that they make an average of $9.58 per hour ($19,926 annually). See Appendix 3 for more wage data.

[13] According to the Registry website, as of February 1, 2009, the Department of Health and Family Services requires completion of the administrator credential for directors of group child care programs licensed for 51 or more children. Directors of programs licensed for 50 or fewer children will need to take one of the three-credit courses in the credential. The Registry awards the credential.

[14] The Department of Children and Families entry-level requirements for group child care centers: http://dcf.wisconsin.gov/publications/pdf/dcf_p_66.pdf. See also: http://dcf.wisconsin.gov/childcare/licensed/pdf/pfs-4091.pdf.

[15] Public Policy Forum. (May 2008). "Child-Care Provider Survey Reveals Cost Constrains Quality." *Research Brief*. 96(5). http://www.publicpolicyforum.org/pdfs/ProviderSurveyBrief.pdf

The full budget, with descriptions of the components and data sources, can be found in Appendices 3 and 5.

The total estimated annual direct service cost of running a child care center serving 76 children under current Wisconsin licensing standards is estimated at $427,511 (per-child cost of $5,625).

Table 4. Baseline Center Proxy Budget Expenses

Budget Item	Expenses
Salaries	$243,504
Mandatory Benefits	$30,511
Other Benefits	$1,496
Non-personnel Costs	$152,000
Total Direct Service Cost	**$427,511**
Direct Service Cost Per Child Per Year	**$5,625**

Proxy Budgets: Factors to Consider

- How many staff members are needed, according to teacher-to-child ratios?
- What are staff qualifications and education?
- What are staff salaries and benefits?

Child Care Center Better-Quality Budget

Unlike the baseline budget, the Better-Quality Budget exceeds what Wisconsin licensing standards require for staff-to-child ratios. Research shows that smaller staff-to-child ratios are associated with higher quality[16][17]. This proxy budget derives its staff-to-child ratios and group size maximums from the National Association for the Education of Young Children (NAEYC), a widely-respected professional organization that promotes quality early childhood education and has an accreditation process for child care centers. Centers accredited by NAEYC have been evaluated by NAEYC staff and found to meet or exceed extensive criteria for high-quality centers.

As Table 5 shows, the Better-Quality Budget requires three more employees than the baseline budget. It is assumed that the 13 teaching staff will consist of five teachers and eight assistant teachers. (As in the other proxy budgets for centers, the center also includes a director and an administrative assistant/bookkeeper.)

[16] Roach, Mary, D. Adams, D. Riley, and D. Edie. (Sept. 2002). Wisconsin Child Care Research Partnership *Issue Brief #8: What characteristics relate to child care quality?* Madison, WI: University of Wisconsin-Extension.
[17] Helburn, Suzanne W., Ed. (1995). *Cost, Quality and Child Outcomes in Child Care Centers, Technical Report*, Dept. of Economics, Center for Research in Economic and Social Policy, University of Colorado at Denver.

Table 5. Staffing Numbers for Group Center Better-Quality Proxy Based on NAEYC Standards						
Age of child	**Group size maximum**	**Staff-child ratio**	**Children served in proxy budget center**	**Staffing numbers in proxy budget center**	**Teachers**	**Assistant Teachers**
Birth - 2	8	1:4	8	2	1	1
2-2.5 years	12	1:4	12	3	1	2
2.5-3 years	12	1:6	16	4	1	3
3-4 years	20	1:10	20	2	1	1
4-5 years	20	1:10	20	2	1	1
Total			**76**	**13**	5	8

The Better-Quality budget also increases staff qualifications and wages. The most significant difference is that teachers in this proxy budget are required to have Associate Degrees in Early Childhood Education or equivalent qualifications (The Registry's level 12).[18] In setting the estimated average wage for teachers, we used data from the Milwaukee Area Technical College (MATC). The MATC 2008 Graduate Report stated that the average salary for its graduates with an Associate Degree in early childhood was $27,448.[19] That is an hourly wage of approximately $13.20 per hour, an increase of $3.62 per hour over the baseline budget.

Center directors would be required to have completed the Wisconsin Child Care Administrator Credential and also would have at least an Associate Degree or equivalent[20], placing them at level 13 in The Registry's career levels. Assistant teachers would have high school diplomas or GEDs and one to two courses in early childhood education, depending on the age of children served, as well as 80 additional hours of tiered training, as specified by The Registry's level 3. For more salary data and details on qualifications, see Appendices 3 and 5.

All staff members represented in the Better-Quality proxy budget receive health insurance (estimated at $1,496 per staff member) but no staff members receive dental insurance or pension.

The total estimated annual direct service cost of running a child care center serving 76 children under the Better-Quality proxy budget's estimates and assumptions is $609,751 (per-child cost of $8,023).

[18] The Registry's level 12 lists a Bachelor's Degree in another field or an Associate Degree in another field with 30 related credits as also being acceptable instead of an Associate Degree in early childhood education.
[19] http://www.matc.edu/documents/grad_report08.pdf
[20] The Registry's level 13 lists a Bachelor's Degree in another field plus a Registry Credential or a Bachelor's Degree in another field plus 30 related credits as also being acceptable instead of an Associate Degree in early childhood education plus a Registry Credential.

Table 6. Better-Quality Center Proxy Budget Expenses	
Budget Item	**Expenses**
Salaries	$386,840
Mandatory Benefits	$48,471
Other Benefits	$22,440
Non-personnel Costs	$152,000
Total Direct Service Cost	**$609,751**
Direct Service Cost Per Child Per Year	**$8,023**

Child Care Center High-Quality Budget

The high-quality group of proxy budgets represents a best-quality early childhood care and education system – the type of system that, while costly, would be most likely to generate long-term economic benefits according to accepted research. For the group center high-quality budget, the teacher-child ratios were derived from NAEYC standards, as in the Better-Quality Budget (see above for details). While the overall number of teachers is the same as the Better-Quality Budget, (13), the positions are distributed differently, as shown in Table 7. This budget has more teachers than both the baseline and better-quality budgets (10), and fewer assistant teachers (three). Additionally, like the other center proxy budgets, the center is also staffed by one director and one administrative assistant/bookkeeper (still serving the same number of children, 76).

Table 7. Teaching Staffing Numbers for Group Center High-Quality Proxy Based on NAEYC Standards

Age of child	Group size maximum	Staff-child ratio	Children served in proxy budget center	Staffing numbers in proxy budget center	Teachers	Assistant Teachers
Birth - 2	8	1:4	8	2	2	0
2-2.5 years	12	1:4	12	3	2	1
2.5-3 years	12	1:6	16	4	2	2
3-4 years	20	1:10	20	2	2	0
4-5 years	20	1:10	20	2	2	0
Total			**76**	**13**	10	3

The high-quality proxy budget has notably higher staff educational requirements compared to Wisconsin's current system, because research shows that education is associated with increases in quality[21][22]. The center director requires at least a Bachelor's Degree and an administrator's credential

[21] Roach, Mary, D. Adams, D. Riley, and D. Edie. (Sept. 2002). Wisconsin Child Care Research Partnership *Issue Brief #8: What characteristics relate to child care quality?* Madison, WI: University of Wisconsin-Extension.
[22] Helburn, Suzanne W., Ed. (1995). *Cost, Quality and Child Outcomes in Child Care Centers, Technical Report*, Dept. of Economics, Center for Research in Economic and Social Policy, University of Colorado at Denver.

(Registry level 15). All Teachers have Bachelor's Degrees in early childhood education or equivalent (Registry level 14).[23] Assistant teachers have Associate Degrees in early childhood education or equivalent (Registry level 12).

The higher educational requirements correspond with higher salaries than in the other two proxy budgets. A teacher in the high-quality scenario would make $18.63 per hour ($38,750 annually)[24]. That is $9.05 more per hour than the baseline.

In this high-quality scenario, all employees receive health and dental insurance, as well as pension benefits. The full budget, with descriptions of the components and data sources, can be found in Appendices 3 and 5.

The total annual direct service cost of running a child care center serving 76 children under a high-quality system is estimated at $832,798 (per-child cost of $10,958).

Table 8. High-Quality Center Proxy Budget Expenses

Budget Item	Expenses
Salaries	$550,194
Mandatory Benefits	$68,939
Other Benefits	$61,665
Non-personnel Costs	$152,000
Total Direct Service Cost	**$832,798**
Direct Service Cost Per Child Per Year	**$10,958**

Family Child Care Proxy Budgets

Family Child Care Baseline Budget

In accordance with Wisconsin licensing standards, the baseline family child care budget reflects a full-day program with one staff person and eight children.[25] It is assumed that the provider has taken three[26] non-credit courses in early childhood education, but has not earned a Child Development Associate certificate or an Associate Degree. It is assumed that the provider does not have health insurance, dental insurance, or a pension plan.

[23] The Registry's level 14 lists a Master's Degree or a Bachelor's Degree in another field plus 36 related credits as also being acceptable instead of a Bachelor's Degree in early childhood education.
[24] See Appendix 5 for explanation of wage estimate.
[25] According to Wisconsin licensing standards, if three or four children under the age of two are in care, the number of other children in care is reduced.
[26] http://dcf.wisconsin.gov/childcare/licensed/pdf/pfs-4091.pdf. Those caring only for children above two years of age are only required to take two courses.

Baseline wages were estimated using findings of the WI Child Care Research Partnership. According to its 2003 statewide report, the average annual net income for a licensed family provider was $18,451 in 2001.[27] In 2008 dollars, that is an hourly wage of $10.78 per hour, or about $22,422 annually.

The total annual direct cost of running the program is estimated at $41,853 (per-child cost of $5,232). The full budget, with descriptions of the components and data sources, can be found in Appendices 4 and 6.

It must be noted that this kind of hypothetical budgeting presents difficulties in a family care setting. For example, independent contractors operating out of their own homes often do not budget a wage or salary for themselves. It is common for parents to pay family child care providers on a weekly basis, but pay schedules vary. Family child care income per hour is based on shifting variables, which include the number of paying children in care, the number of hours worked per week, and the weekly, daily or monthly fees.[28] Helburn et al. found, in a 2002 report on family care provider income, that income was substantially related to the number of children served.[29]

Table 9. Baseline Family Care Proxy Budget Expenses

Budget Item	Expenses
Salaries	$22,422
Self-Employment Taxes	$3,431
Other Benefits	$0
Non-personnel Costs	$16,000
Total Direct Service Cost	**$41,853**
Direct Service Cost Per Child Per Year	**$5,232**

Family Child Care Better-Quality Budget

In the better-quality proxy budget, staffing is the same as the baseline in that one teacher/administrator cares for eight children. Unlike the baseline budget, however, this model shows the teacher getting/purchasing health insurance and dental insurance (but not pension). The budget also assumes the provider has reached Registry level 9, which consists of either the Infant/Toddler credential or the Inclusion credential. Pay is $11.50 per hour or $23,920 per year (assuming a 40-hour work week, which may be uncommon for a portion of family providers).

[27] This section of WCCRP's report analyzed the responses of 224 family care providers. Source: Adams, Diane, Diana Durant, Dave Edie, Maureen Ittig, Dave Riley, Mary Roach, Stephanie Welsh, Deb Zeman. (2001). *Trends Over Time: Wisconsin's Child Care Workforce.* WI Child Care Research Partnership, University of Wisconsin – Extension. http://www.sohe.wisc.edu/outreach/wccrp/pdfs/trends.pdf

[28] Helburn, Suzanne, John Morris, and Kathy Modigliani. (2002). "Family child care finances and their effect on quality and incentives." *Early Childhood Research Quarterly,* 17, 512-538.

[29] While most research on this topic (including Helburn, et al. 2002) identifies family provider wages as very low, local researchers Pawaserat and Quinn suggest that many family care providers in Milwaukee County who receive WI Shares subsidies generate good income. Source: Pawaserat, John and Lois Quinn. (2002). "The Child Care Costs of Engaging the Welfare Population in Work: The Milwaukee Experience." University of Wisconsin-Milwaukee Employment and Training Institute.

The total estimated annual direct service cost of running a family care program serving eight children under the Better-Quality proxy budget is $45,691 (per-child cost of $5,711). For the full budget and data sources, see appendices 3 and 5.

Table 10. Better-Quality Family Care Proxy Budget Expenses

Budget Item	Expenses
Salaries	$23,920
Self-Employment Taxes	$3,660
Other Benefits	$2,111
Non-personnel Costs	$16,000
Total Direct Service Cost	**$45,691**
Direct Service Cost Per Child Per Year	**$5,711**

Family Child Care High-Quality Budget

Staffing for the family or "home-based" child care programs remains the same as the baseline and better-quality versions, with one teacher/administrator for eight children. In the high-quality proxy budget, the provider has, at minimum, an Associate Degree or equivalent. Also acceptable are the intent to complete the Associate Degree within three years, a Bachelor's Degree in another field, or an Associate Degree in another field plus 30 related credits.[30] The pay matches data from the Milwaukee Area Technical College on what its graduates with Associate Degrees in early childhood education earn one year after graduation ($13.20 per hour; $27,448 annually). Additionally, the model assumes that the provider receives (or purchases) health and dental insurance. The full budget, with descriptions of the components and data sources, can be found in appendices 4 and 6.

The total annual direct service cost of running a family child care program serving eight children under a high-quality system is estimated at $49,768 (per-child cost of $6,221).

Table 11. High-Quality Family Care Proxy Budget Expenses

Budget Item	Expenses
Salaries	$27,456
Self-Employment Taxes	$4,201
Other Benefits	$2,111
Non-personnel Costs	$16,000
Total Direct Service Cost	**$49,768**
Direct Service Cost Per Child Per Year	**$6,221**

[30] While The Registry's career levels were not created with family care in mind, these requirements match level 12.

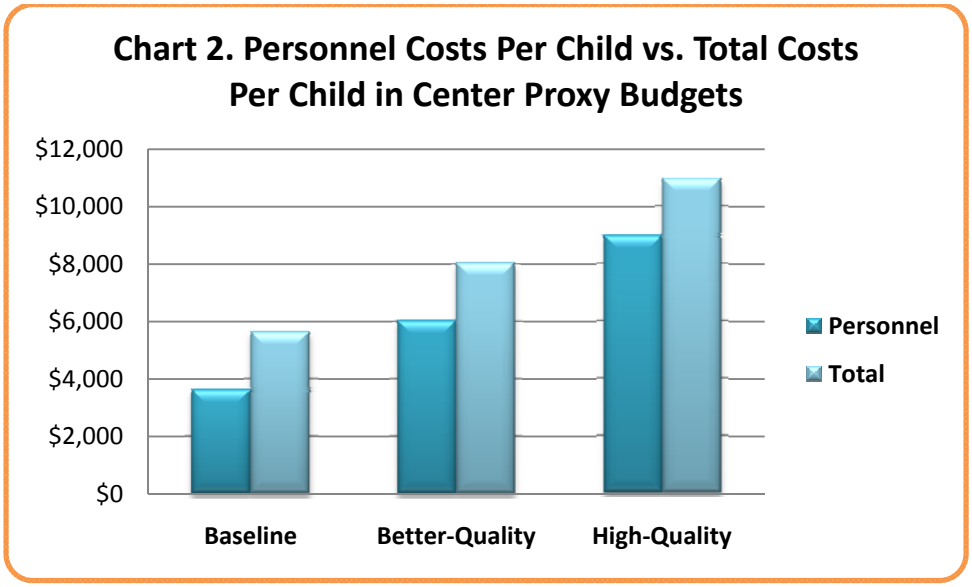
Summary of Estimates

Table 12 shows the proxy budgets for each of the six types of child care settings:

Table 12. Summary of Proxy Budget Direct Service Cost Estimates

	Children Served	Cost	Per-Child Cost
Baseline Group Center	76	$427,511	$5,625
Better-Quality Group Center	76	$609,751	$8,023
High-Quality Group Center	76	$832,798	$10,958
Baseline Family Care	8	$41,853	$5,232
Better-Quality Family Care	8	$45,691	$5,711
High-Quality Family Care	8	$49,768	$6,221

Chart 2, meanwhile, illustrates the differences between the three center-based proxy budget costs while also emphasizing how personnel costs, comprising almost all of each proxy budget, are the main component in quality upgrades. This underscores how important personnel are to quality child care, in terms of factors such as staff-child ratios and qualifications.



Non-personnel costs as defined in this report would not generally vary with increases in quality. As noted earlier in this section, non-personnel costs include rent, utilities, maintenance, food, educational supplies, training, office supplies, insurance, telephone, postage, advertising, fees/permits, and miscellaneous. This report follows the IWPR methodology's recommendation that non-personnel costs amount to about $2,000 per child per year. Material cost, a type of cost category that is introduced under the high-quality scenario, is discussed later in this section and is not included in the proxy budgets.

Calculating the Direct Costs

The child care market for children under age six includes 66,754 children in southeast Wisconsin (see Appendix 2 for details on how that estimate was determined). Data on child care slots among licensed providers reveals that 81% of slots are group child care centers and 19% are family child care. Applying those percentages to our estimated number of children shows 54,071 children as group care users and 12,683 children as family care users. Table 13 shows the per-child costs (including both personnel and non-personnel costs) applied to these figures to create a snapshot of total estimated direct service costs in the southeast Wisconsin system for the current system, as well as for the two hypothetical better-quality and high-quality systems.

The costs represented by the system-wide estimates are/would be borne by a mix of parents, the providers themselves and government. Government costs could be supported through continuation or expansion of Wisconsin Shares child care subsidy funding and/or a variety of other policy mechanisms that are discussed later in this report.

Table13. Calculating Direct Service Costs for the Southeast WI System

	Per-Child Cost	Number of Children*	Direct Cost (cost x # children)
CENTERS			
Baseline Group Center	$5,625	54,071	$304.2 million
Better-Quality Group Center	$8,023	54,071	$433.8 million
High-Quality Group Center	$10,958	54,071	$592.5 million
FAMILY CARE			
Baseline Family Care	$5,232	12,683	$66.4 million
Better-Quality Family Care	$5,711	12,683	$72.4 million
High-Quality Family Care	$6,221	12,683	$78.9 million
SYSTEM-WIDE TOTALS (CENTER PLUS FAMILY CARE)			
Total Baseline Direct Service Cost			**$370.5 million**
Total Better-Quality Direct Service Cost			**$506.2 million**
Total High-Quality Direct Service Cost			**$671.4 million**

**Our estimates hold demand steady as quality varies. More sophisticated modeling is necessary to create estimates in which quality drives demand.*

As shown in Table 13, our best estimate of the annual direct service costs in southeastern Wisconsin's current (baseline) system – both family and center care – is $370.5 million. A high-quality child care system in southeastern Wisconsin has estimated annual direct service costs of $671.4 million, a difference of $301 million from the baseline estimate. The better-quality proxy budget which represents a mid-point between the current system and the high-quality model has an estimated annual direct service cost of $506.2 million. That estimate is $136 million more than the current system and $165 million less than the high-quality modeled system. These direct cost estimates do not include materials costs.

Estimating Per-Child Materials Costs

Materials used in the existing early childhood care and education system do not match the materials that would be used in a high-quality system. Consequently, in this section, we estimate costs associated with upgrades to materials. This estimate only applies to the high-quality system and not the better-quality system.

Materials costs include the cost of outfitting or altering classrooms, as well as supplies and furniture. One example of a potential new cost would be additional tables to ensure that children did not do art projects at the same table where they ate food. A second example would be costs associated with altering sink heights to ensure they matched children's heights.

Unlike the direct costs derived from the proxy budget, these material costs are non-recurring and would only apply to the first year of transition to high-quality standards. The material costs are also different from ongoing non-personnel costs of maintaining child care services, such as rent, food, and maintenance. Ongoing non-personnel costs were not included in the proxy budgets because it is assumed they will be relatively stable with regard to the three levels of quality.

Clearly, many of the materials already used in area child care programs could still be used in a high-quality system. It also is possible that grants would be made available to child care providers to assist in the upgrades and material costs necessary to meet the requirements of a high-quality system. Consequently, this report slightly alters the Institute for Women's Policy Research methodology's estimate of $100 in material costs per child as follows:

- $50 is estimated per child for group centers ($50 x 54,071 children = $2,703,550 total). That's $3,800 in upgrade fees for a center serving 76 children (the number of children used as an estimate in the three proxy budgets above).
- Additionally, $75 is estimated per child for a family child care program ($75 x 12,683 children = $951,225) – that's $600 in upgrade material costs for a family care program serving eight children.
- Added together, the material costs estimate for a high-quality southeastern Wisconsin system as a whole is $3,654,775.

Table 14. Adding Material Costs

High-Quality System Direct Service Cost Estimate	$671.4 million
Materials Cost Estimate	$3.7 million
Total Estimated Direct Service Cost	$675.1 million

Table 14 shows that adding the material costs estimate to the direct service costs estimate creates a final direct service cost estimate of $675.1 million for a high-quality Southeast Wisconsin early childhood education system.

ESTIMATING INFRASTRUCTURE COSTS

The previous report section analyzed the operational costs of running an early childhood care and education program. In this section, we examine what it takes to keep a system running – the infrastructure that underlies the system of programs. Infrastructure costs include funds to help providers attain quality, professional development to ensure an adequate supply of qualified teachers, as well as monitoring, evaluation, and governance. Most of the infrastructure costs related to quality upgrades in the early childhood care and education system would be borne by government entities to ensure that the new system is properly implemented and monitored and would be incurred regardless of the level of quality obtained (i.e., costs would apply to either the high-quality or better-quality plans outlined in the previous section). Potential infrastructure costs are analyzed or estimated in the following areas:

- Technical assistance
- Monitoring for quality assurance
- Staff professional development
- Evaluation
- Governance

Table 15 shows cost estimates associated with the infrastructure improvements deemed necessary to create a better-quality or high-quality system of early childhood care and education in southeast Wisconsin. Each category is described in further detail in the rest of this section.

Table 15. Summary of Year One Quality Upgrade Infrastructure Costs	
Technical Assistance	$3 million
Monitoring and Quality Assurance	$1.2 million
Professional Development	Not estimated; further research required
Evaluation and Assessment	$3 million
Governance	$229,000

Since the government already devotes some expenditures to most infrastructure categories, our estimates do not represent completely new costs, as the government could build upon their existing funding of, for example, child care licensing and certification employees.

Technical Assistance and Consultation to Programs

Incorporating new high-quality standards into child care establishments will require new levels of technical assistance. Unlike inspectors or monitors, who judge whether programs meet standards, technical advisors will be needed to help programs achieve the high-quality standards and requirements. The IWPR methodology describes technical advisors as individuals who consult on issues such as curriculum, program design, other educational issues, and financial management.

While some technical assistance already is available to southeast Wisconsin's early childhood care and education programs, more would be needed in a shift to a better-quality or high-quality system. Some

ongoing technical assistance always will be necessary, but the most intensive consultation would be needed during implementation of quality improvement policies.

The IWPR methodology assumes that one technical advisor could serve 20 sites or programs averaging 75 children each. See Appendix 2 for information on how regional numbers of children using child care were estimated. While the average number of children in this project's programs does not exactly match the IWPR estimate, we use the IWPR estimate for simplicity. The calculation box at right provides additional details. We estimate that 45 Technical Advisors would be needed to help upgrade the current system to either better-quality or high-quality.

The state currently contracts with county resource and referral agencies such as 4C (which stands for Community Coordinated Child Care) to conduct training for child care providers. It is expected that such contracts would continue in an expanded form under an upgraded system, though technical advisors could also be state employees. The IWPR methodology assumes technical advisors are paid the same as state child care licensing staff. The average salary of a Licensing/Certification Specialist at the Wisconsin Department of Children and Families is approximately $46,300 ($68,000 including benefits).[31] The one-year cost of 45 technical advisors for southeast Wisconsin at that rate, including their benefits, would be $3 million, or $46 per child.

The costs of technical assistance over the years would be expected to decline as eventually most services would be directed to new programs entering the system and/or struggling programs.

CALCULATION:
Technical Assistance

66,754 children/75 children per groups = 890 child groups

890 child groups/20 groups per T.A. = 45 Technical Advisors needed

$68,000 salary and benefits x 45 T.A.s = $3 million

$3 million / 66,754 children = $46 cost per child

Monitoring for Quality Assurance

Wisconsin already has a network of staff charged with overseeing licensing and monitoring for regulated child day care programs. In implementing the better-quality or high-quality systems described here, the state would need to expand monitoring to meet new quality standards.

Following the IWPR methodology's recommendations, it is assumed that one inspector would be needed for every 50 programs, or 18 inspectors for southeast Wisconsin.

[31] Data from personal communication with WI DCF staff.

Using the average pay of current state licensing staff ($68,000 including benefits), 18 inspectors for the region would cost $1.2 million, or $18 per child.

A 2009 ranking of state child care center regulations and oversight[32] notes that, currently in Wisconsin, child care licensing staff have an average caseload of 333 programs. This is significantly higher than the National Association for the Education of Young Children's recommendation that licensing staff maintain a caseload of 50 center-based programs.

CALCULATION: Inspectors/Monitors

66,754 children / 75 children per group = 890 child groups

890 groups / 50 programs per Inspector = 19 Inspectors needed

$68,000 salary and benefits x 19 Inspectors = $1.2 million

$1.2 million / 66,754 children = $18 cost per child

Professional Development

A large body of research has tied higher teacher education to higher quality of early childhood care and education. Unfortunately, research suggests the early childhood care and education workforce in Wisconsin is on average less educated than it was in the past. Surveys conducted for the Wisconsin Early Childhood Association showed that 44 percent of Wisconsin child care center teachers had an Associate degree or higher in 1994, compared to only 28 percent in 2001.[33] Similarly, while 73 percent of center directors had a Bachelor's Degree or above in 1980, only 47 percent did in 2001.[34] Research identifies low wages as the best explanation for why college-educated employees have been leaving the field.[35]

Higher qualifications for employees, accompanied by increased pay and benefits, lie at the heart of the quality upgrades analyzed in this report. For example, in the better-quality system, it is assumed that all center-based teachers will have Associates Degrees or equivalent. In the high-quality system, it is assumed that all center-based teachers will have Bachelor Degrees or equivalent and assistant teachers will have Associate Degrees or equivalent. If such systems were implemented, the current pool of child care providers would need to upgrade their qualifications.[36] A previous Public Policy Forum report estimated the size of southeast Wisconsin's child care workforce, including non-teaching employees, at 12,400 individuals.[37] Under quality upgrades, funding would be necessary both for training to help employees meet the new standards, as well as funds to support local resource and referral agencies,

[32] National Association of Child Care Resource and Referral Agencies (NACCRRA). (Mar. 2009). "We Can Do Better: 2009 Update."
[33] Adams, Diane, M. Roach, D. Riley, and D. Edie. (Oct. 2001). "Losing Ground or Keeping Up? A Report on the Wisconsin Early Childhood Care and Education Workforce, 2001." Report to the WI Early Childhood Assoc.
[34] Adams, Diane, D. Durant, D. Edie, M. Ittig, D. Riley, M. Roach, S. Welsh, and D. Zeman. (Nov. 2003). "Trends Over Time: Wisconsin's Child Care Workforce." WI Child Care Research Partnership. University of Wisconsin-Extension.
[35] Ibid.
[36] Additional research is needed to model the potential impacts of higher qualifications and pay enticing new graduates who would not otherwise have become child care employees to join the field, or, conversely, of pushing some current employees to drop out of the field.
[37] Public Policy Forum. (May 2009). "The Economic Impact of the Early Childhood Education Industry in Southeast Wisconsin." http://www.publicpolicyforum.org/pdfs/ECEBenefits.pdf.

colleges, and universities in revising aspects of their offerings to ensure that the teacher training opportunities would be sufficient to meet new demands.

In Wisconsin, the government already plays a role in professional development of early childhood care and education professionals.[38] This indicates that upgrades in this area need not require a completely new system, but rather, could focus on expanding the current system. Since 1999, the state's T.E.A.C.H.[39] program has provided scholarships to early childhood professionals in order to help them complete a Registry credential, take between three and eight credits of training, pursue an Associate Degree, or pursue a Bachelor Degree.

The T.E.A.C.H. program effectively increases the stability[40] of the labor force in child care programs, which have traditionally faced turnover rates of about 40 percent.[41] All scholarship recipients receive a salary increase or bonus after completing coursework, and participants commit to remain in the "sponsoring child care program or the field" for six months to one year beyond the contract period, depending on the scholarship model.

Professional Development: Factors to Consider

- How many more teachers will be needed?
- What additional training and education will teachers need?
- How would the training and education systems need to expand or adapt to handle the increased demand?
- How will the training and education be paid for?

Costs of upgrades to professional development would be borne mainly by individuals, with some forms of public support also playing a role. Once the overall pay and professionalism of the early childhood care and education field is increased, there is potential for a future increase in interest from college-educated individuals who would not otherwise have considered the field, and who would not require extensive public support to complete their degrees.[42]

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[38] State T.E.A.C.H. funding is coupled with funding for the R.E.W.A.R.D. program, which will receive $3.48 million per year for the 2009-2011 biennial budget. Through the R.E.W.A.R.D. stipend program, individuals receive salary supplements based on longevity in the field and their educational attainment. R.E.W.A.R.D. = Rewarding Education With Wages and Respect for Dedication. For more information: http://www.wecanaeyc.org/reward/.

[39] T.E.A.C.H. = Teacher Education And Compensation Helps. Twenty-two states have TEACH programs. For more information: http://www.wecanaeyc.org/uploads/media/TEACH_brochure_0608update.pdf

[40] While the overall turnover for Wisconsin's child care workforce is 40 percent, for T.E.A.C.H. recipients it is 11 percent, and is only two percent during their recipient commitment year. Source: WI DCF website, http://dcf.wi.gov/childcare/teach/default.htm.

[41] Turnover rate – 2001 data from: Adams, Diane, Diana Durant, Dave Edie, Maureen Ittig, Dave Riley, Mary Roach, Stephanie Welsh, Deb Zeman. (2001). *Trends Over Time: Wisconsin's Child Care Workforce.* WI Child Care Research Partnership, University of Wisconsin – Extension. http://www.sohe.wisc.edu/outreach/wccrp/pdfs/trends.pdf

[42] Additional research is needed to pinpoint teachers' qualification levels and the number of new teachers and assistant teachers needed in an upgraded system. A winter 2010 survey project by the Wisconsin Early Childhood Association will collect more current statewide workforce data.

Evaluation and Assessment

Enhanced evaluation will need to accompany improvements in quality to ensure new policies are effective and to identify weaknesses. Evaluations can assess a broad spectrum of issues, from how increased staff qualifications effect worker pay to the more complex question of whether and to what extent the quality of early childhood care and education has improved following implementation of new policies.

Due to the variety of evaluation styles and intensities, it is difficult to estimate the cost of a potential evaluation. It is likely that independent evaluations would take place annually, but that there would be an added cost in the first year to account for designing the evaluation plan.

A local evaluation that was of similar scale and complexity was the comprehensive evaluation of the Milwaukee Parental Choice Program (MCPC). While eventual implementation costs may have varied, the original MCPC 2005 estimates were: Year 1: $2.3 million; Year 2: $1 million; Years 3-5: $5.7 million. Since this report focuses on the seven-county region, we estimate $3 million for the first year of the evaluation.

Governance

We anticipate that a regional or state-level government office would be in charge of administering a new better- or high-quality program for southeastern Wisconsin. For a state-wide implementation, the IWPR methodology estimates a four-person staff (three staff and one supervisor). Since this project scope is the seven-county southeast Wisconsin area, our estimates reduce that by one staff person (two staff and one supervisor). Using the state salary information we have available for a $68,000 staff person and a $93,000 supervisor, (including benefits), we estimate a cost of $229,000 per year.

POLICY ANALYSIS AND CONCLUSION

Introduction

This report's cost estimates illustrate the gap between the current early childhood care and education system in southeast Wisconsin and potential better- or high-quality systems. To improve quality on a system-wide basis, parents and providers would need to expend more in direct service costs, while additional system infrastructure costs likely would be borne by the public sector, providers, parents, philanthropists and the private sector. This section analyzes models in other states for funding quality improvements in early childhood care and education systems, as well as the available policy options for southeast Wisconsin.

Funding Models

Quality upgrades to early childhood care and education require increased investment of public and private funds. If policymakers decide that it is important to increase the quality of early childhood care and education and wish to make a greater investment, there will be a need for *sustainable* public funding sources and financing mechanisms. A variety of quality reforms has been implemented around the country over the past decade; these policy initiatives have been accompanied by several models of financing mechanisms.[43] Below, we highlight some of the most innovative models.[44] It is important to note that because the private sector also plays an important role in the child care market, public-private models are common in other states.

Funding mechanisms fall into the following categories, each of which is illustrated with an example:

- **Earmarked revenues**
  Earmarked revenues set aside a portion of existing general or special purpose revenues. They may therefore be easier to pass than a new tax, and, in theory, protect early learning programs from competition with other government services for limited public support. Most often it is sales or income tax revenues that are earmarked at the state level and property or sales taxes that are earmarked at the local level. Earmarks are usually meant to be long-term, in order to improve the child care industry's reliance on them, but in fact often require renewal due to sunset provisions, which introduce an element of uncertainty.

  The Nebraska Early Childhood Education Endowment is an example of the use of earmarked income tax revenue. Nebraska passed a constitutional amendment in 2006, subsequently approved by the voters, that directs the interest from $40 million in *the state's cash reserves*

[43] Cohen, Julie, Barbara Gebhard, Ann Kirwan, and Brandy Jones Lawrence. (2009). "Inspiring Innovation: Creative State Financing Structures for Infant-Toddler Services." Zero to Three and Ounce of Prevention Fund.
[44] Two reports exploring funding models: 1) Public Policy Forum. (April 2008). "Toward High Quality Early Childhood Education: An Imperative for the Regional Economy." http://www.publicpolicyforum.org/pdfs/atlantapaper.pdf; 2) Edie, David, D. Adams, D. Riley, and M. Roach. (Feb. 2004). Wisconsin Child Care Research Partnership, Report No. 4: Alternative Models for an Early Care and Education System. University of Wisconsin-Extension.

fund to be put into an endowment fund called the Sixpence Early Learning Fund. Interest from a $20 million private fund also is funneled into the endowment fund. The state funds are expected to generate about $2 million in interest each year and the private funds to generate $1 million annually. The endowment fund provides competitive grants to school districts to provide birth-to-3 services for at-risk children in partnership with local community agencies. In FY 2009, $1.7 million was distributed to grantees.

- **Dedicated taxes or fees**

  Dedicated fees and taxes can be levied specifically to create a new revenue stream for early learning efforts. At the state level these are often sin taxes, levied on commodities such as cigarettes or alcohol, while at the local level they may be fees assessed on particular activity, such as registering a car. Certain dedicated taxes, such as sin taxes, tend not to be sustainable over time, as revenues decline with changing consumer habits. Dedicated taxes in the form of sales or sin taxes also are regressive, which may be politically unpalatable, as may be the fact that the tax would be used for a purpose unrelated to the taxed commodity. Specially assessed fees could be tied to a purpose linked to quality child care, for example, a fee assessed on commercial real estate developers whose developments create new jobs and thus greater demands for child care.

  Since 1999, the Missouri Early Childhood Development, Education, and Care Fund has received dedicated tax revenue from the Missouri Gaming Commission Fund to be used for early care and education quality improvement and child care subsidies for low-income families. The gaming fund is comprised of a *gaming tax levied on casinos,* representing a portion of the adjusted gross receipts, and an admissions fee collected from casino patrons. Over the past decade, nearly 60% of the almost $581 million collected has gone to the early childhood fund. The amount allocated to the early childhood fund in FY 2009 totaled $30.1 million.

- **Voluntary taxes or fees**

  Voluntary taxes or fees often are assessed on gambling activities such as the lottery or casino gaming. Other common voluntary revenue streams come from donations generated by tax return check-offs or special license plates. Using lottery proceeds is advantageous in many ways. Once approved, the use does not need repeated legislative or voter approval. In addition, because it is a dedicated source, programs do not compete for limited general revenues. However, lottery proceeds are controversial: the lottery may operate in fact as a regressive tax and it may encourage gambling. In addition, the annual revenues can be unpredictable. Voluntary taxes and fees could be implemented at either the state or local level.

  All proceeds from the Georgia Lottery, initiated in 1992, fund supplemental education programs including, since 1995, universal pre-Kindergarten. Funds from the lottery proceeds are appropriated by the legislature to the various educational programs. Funds for pre-K are made available on a competitive basis to public school districts and private early childhood education centers. Each classroom must meet certain quality standards. In the 2007-2008 school year,

funding was available for 78,000 children (58% of Georgia's four-year olds) to attend 3,900 pre-K classrooms in every county in the state at a total cost of $324.9 million.

- **Income tax credits or deductions**
  These credits or deductions may be designed to apply either to personal or corporate income tax and they may be easier to enact than a new assessment or fee. Many states have corporate tax credits for businesses that provide or subsidize child care for their employees; there may or may not be a requirement that the care is high quality. If these credits are not well publicized, if there is too much red tape, or if the credits are too limited in applicability, businesses will not utilize them. In addition, many businesses may not pay enough (or any) state tax liability and thus the credits would not serve as an incentive. In localities such as southeast Wisconsin, in which there is no local income tax, tax credits and deductions can only be enacted at the state level.

  For individuals, there is a greater likelihood of the credit or deduction being used, particularly if the credits are designed to be refundable—even families with little or no tax liability can take advantage. Refundable credits or deductions could even be combined with earned income tax credits to greatly increase a family's real income. But the design matters: if structured as a tax credit, income limits will leave out middle class families, while if structured as a deduction, families who do not itemize their tax return will not be able to participate. Credits or deductions that require use of regulated child care providers could be structured to encourage parents to choose more qualified providers. Tax credits and deductions are easy and affordable for the state to administer as part of tax code.

  The most recent example of tax credits for improvements in child care quality are Louisiana's School Readiness Tax Credits, passed in 2008. These *four different tax credits* are intended to provide fiscal incentives for improving quality of early childhood care and education. The credits are for families who choose providers who participate in the state quality rating and improvement system (QRIS), with higher credits for those choosing higher-quality care; for providers who participate in the QRIS, based on their quality rating and the number of subsidized children they serve; for teachers and directors who work in centers that participate in QRIS, based on their level of training and education; and for businesses that make donations to QRIS providers. The state estimates 1,247 teachers and directors and 73 centers were eligible for the credits in their first year, totaling approximately $3.5 million in state tax benefits. (Estimates for the number of parents and businesses eligible for the credits are not available.)

- **Endowment or trust fund**
  Many states have created endowments or trust funds to generate interest that can be used to fund early learning initiatives. These funds can be created with public dollars, private dollars, or a combination of both and can be created at the state or local level. Their effectiveness depends on their size; the interest generated must be significant. In addition, if the principal of the fund is to grow over time, the revenue stream that feeds it must be reliable and sustainable.

This revenue stream could take the form of any of the public revenue streams highlighted above. A trust fund or endowment takes on the risk of an unstable economy and must be managed and administered prudently, either within or outside government; if the fund is initialized with private dollars, there may be a desire for an independent investment board to manage the fund.

In 1999, the Kansas legislature established the Kansas Endowment for Youth (KEY) Fund, a *trust fund* into which tobacco settlement payments are credited. The legislation also created the Kansas Children's Cabinet to advise the governor and legislature on programs that will be funded from tobacco money. The trust fund is invested and managed by the Board of Trustees of the Kansas Public Employees Retirement System. The legislature also created the Children's Initiatives Fund and provided that transfers would be made from the KEY Fund to the Children's Initiatives Fund on an annual basis. Transfers from the KEY Fund to the Children's Initiatives Fund are capped at $45 million, plus a 2.5 percent annual inflation factor, in order to allow tobacco revenues to accumulate in the KEY Fund so as to create an endowment. However, due to lower tobacco payments than expected, as well as transfers from the KEY Fund to the general fund to make up shortfalls in the state budget, the KEY Fund is not a true endowment fund and has not grown over time. Appropriations from the Children's Initiative Fund for early childhood education in FY 2009 total nearly $30 million.

Policy Options

Should policymakers decide to tackle the gap between our region's current system of early childhood education and a better- or best-quality system, not only will there need to be a determination of *how much* investment should be made, but also *in what way* the investment should be made. The models described above are examples only of how a revenue source for a quality improvement initiative might be structured. The policy initiative itself also could come in one of many forms.

We examine five different policy options, each of which should be debated on its own merits:

1. **Status quo:** Under this option, the current regulatory framework, which is not focused on improving quality, would remain unchanged. Currently over $200 million is invested in Milwaukee County (over $350 million statewide) in child care subsidies for low-income families, with no guarantee that those funds are not going to low-quality providers and almost no way for parents to know the quality of the provider they are choosing to care for their children unless the provider has undertaken the costly step of becoming an accredited center.

   The proxy budget for this baseline system estimates $5,625 in direct service costs per child for center-based child care and $5,232 per child for family child care. As a system, that is about $370.5 million per year in direct service costs (what it costs providers to run their centers).

   If the state increases regulation of the child care subsidy program, Wisconsin Shares, to reduce fraud and save money, but does nothing to address quality, that will not move the system off of

the status quo. The cost savings of these types of regulations, which do not focus on quality improvement, would need to be balanced against continued expenditures related to the high social cost of poor early childhood education such as special education, criminal justice, welfare, etc.

2. **Incremental improvements:** The concept of incremental improvements is best represented in this report by the "better-quality" proxy budget. Under this policy option, incentives may be provided, or regulations may be strengthened, to improve employee qualifications, pay, and benefits. Smaller teacher-child ratios may be regulated, as well. The proxy budget direct service cost estimates for "better-quality" are $8,023 per child for centers and $5,711 per child for family care. As a system, that is an estimated $506.2 million in direct service costs.

   Incremental improvements are usually less costly and therefore more politically feasible than transformational reform efforts, and in some cases they may provide the initial foundation needed to generate other improvements down the line, building toward an eventual best-quality system. However, there is a risk in taking an incremental approach; if higher-quality care is not eventually obtained, perhaps due to changes in administration or governance, then the long-term benefits associated with highest quality care also will not be obtained.

   Thus, policymakers must ask: Are incremental improvements enough to generate benefits that would exceed costs? The evidence from longitudinal research indicates that lesser-quality programs have more modest effects on children. [45]

   Implementing such incremental improvements, however, could send a message to the early childhood workforce that qualifications and training are extremely important, and could possibly draw more highly qualified workers into the system. Incremental improvements also could be coupled with stricter regulations around use of Wisconsin Shares child care subsidies, so that new rules encompass both increased accountability and increased quality.

3. **Targeted Interventions:** Policymakers may decide that, while they are interested in programs that create the long-term benefits of model programs, perhaps it is not feasible to implement quality upgrades across the entire system. They may instead decide to opt for a targeted intervention that seeks to invest funds to reach those most in need of high-quality early childhood care and education.

   There are a few different ways this could be structured:

   - Target a disadvantaged geographic area where need is high, such as certain neighborhoods, ZIP codes, Census tracts, cities or counties.

[45] Schweinhart, Lawrence. (Dec. 7-8, 2007). "How to Take the High/Scope Perry Preschool to Scale." National Invitational Conference of the Early Childhood Research Collaborative, Minneapolis. http://www.earlychildhoodrc.org/events/presentations/schweinhart.pdf

- Target a certain age group. For instance, those most interested in early brain development may target all infants in child care, whereas those most interested in school readiness may target three- and four-year-olds.
- Target low-income families, such as recipients of Wisconsin Shares child care subsidies.
- Target areas with evidence of low-quality care plus Wisconsin Shares fraud. It may be politically palatable to reduce fraud and protect taxpayer dollars through increased monitoring and regulations while simultaneously upgrading quality.
- A combination of the above options is also a possibility, such as targeting low-income families living in a certain geographic area.

Targeted interventions have their pros and cons.[46] On the positive side, targeted interventions may be more able to focus on the elements of high-quality because resources would not be spread as thin as in system-wide upgrades. Additionally, research suggests that the greatest benefits of highest-quality care accrue to the most disadvantaged children, so a targeted program could show more dramatic cost-effectiveness in terms of generating larger benefits than programs that serve all children. Targeted interventions also may be more appealing to those who are uncomfortable with widespread government intervention in the child care marketplace. Finally, targeted interventions may be easier to implement politically than system-wide upgrades and, once a policy is in place, policymakers could decide to expand its reach at a later point.

Supporters of a universal, or system-wide, focus for quality upgrades argue that by casting the widest net, universal policies are more effective at reaching all children who need the help. They also argue that low child care quality and lack of school readiness are not just problems of a few, but rather, child care quality is found to be low across the board.[47] Additionally, some claim that universal interventions are more adequately funded because they are not perceived as charity programs. Another significant concern is that, while targeted models may cost less by serving fewer children, they may incur other costs in the ongoing work it takes to establish and monitor the eligibility of the children served by the programming. Finally, targeted interventions may be harder to implement, politically, because *all* taxpayers would be asked to fund a policy that only upgrades *some* child care programs.

Because the estimates in this report were developed on a per-pupil basis, they can be used to estimate the costs of any targeted policy once the number of children to be affected by the policy is determined. It should be noted that a targeted policy may be either a better-quality effort or a best-quality effort.

[46] Barnett, W. Steven, Kirsty Brown and Rima Shore. (April 2004). "The Universal vs. Targeted Debate: Should the United States Have Preschool for All?" *Preschool Policy Matters*. NIEER. Is. 6.
[47] Lowe Vandell, Deborah, and Barbara Wolfe. (Nov. 2000). "Child Care Quality: Does It Matter and Does It Need to Be Improved?" Institute for Research on Poverty. Special Report No. 78.

4. **Quality Rating and Improvement System (QRIS):** Quality Rating and Improvement Systems (QRIS) have been implemented in over 20 states to assess and rank the quality of child care programs while also providing support for quality improvements. Providers' participation in a QRIS can be made mandatory or voluntary, and may be tied to receipt of public subsidies for care of children from low-income families.

   QRIS policies can eliminate two of the main system flaws identified in this report as elements of market failure and market inefficiency: insufficient consumer information, and a lack of incentive on the part of providers to increase quality. By rating child care quality and providing that information to parents, what was once a subjective opinion becomes objective and transparent, allowing parents to make more informed decisions about placing their children in higher-quality centers. When the demand for high quality increases, economic theory predicts that the supply of high-quality providers will, in turn, grow. Specific monetary incentives and supports, including training and technical assistance, also can assist providers in achieving high quality.

   A QRIS policy can be structured to incentivize quality in moderate or strong ways. A more moderate structure provides an identical level of child care subsidy to providers of low and high quality for serving children from low-income families. The QRIS plan that was introduced by the governor, but not approved by the Wisconsin Legislature in the 2007-2009 biennial budget used this moderate approach.

   A way to more forcefully incentivize strategy, called tiered reimbursement, was reflected in the failed attempts at passing a QRIS policy in the 2005-2007 biennial budget cycle. That policy would have provided smaller amounts of Wisconsin Shares child care subsidy money to providers with lower quality ratings, and higher amounts to providers with higher quality ratings—a monetary incentive for providers to work to increase their quality, including money that could potentially pay more for higher-quality caregivers and teachers.

   QRIS and tiered reimbursement may gain support in the wake of extensive reports of fraud by providers regarding Wisconsin Shares child care subsidies. Linking those subsidies to quality benchmarks that are regularly monitored could provide an effective mechanism for weeding out those providers who are not legitimately focused on running scrupulous child care and early learning programs.

   Because of the different ways QRIS policies can be structured, the concept could be an element of an incremental improvements policy, or a more transformational policy aimed at achieving highest quality. Additionally, QRIS could be implemented as a targeted intervention strategy by targeting child care providers who serve families receiving Wisconsin Shares subsidies. However, QRIS would have quality implications for the child care system as a whole—centers that serve Shares recipients also serve other families, and other providers may voluntarily opt to be rated as a way to provide information to parents and remain competitive.

The ability to implement QRIS in different ways can be both a strength and a weakness. Those most interested in society reaping the economic benefits of very high-quality programming may be disappointed by a QRIS policy that lacks tiered reimbursement or defines high quality inadequately. Such a moderate policy would be unlikely to generate the large return on investment of model high-quality programs.

On the other hand, as a targeted intervention QRIS would be less costly than universal interventions that mandate upgrades for the entire system. In addition, by providing information to parents, who are the consumers of care and early learning, QRIS could realign market forces to increase both the supply and demand for quality.

5. **Highest quality:** System-wide reforms that maximize quality for all children in care are expensive and, as such, uncommon. Such a policy change requires large amounts of money and political will. The highest-quality proxy budgets estimate per-child direct costs of providing the best quality care to be $10,958 for center care and $6,221 for family care. As a southeast Wisconsin system, the total direct service costs are estimated at $671.4 million. [48]

   As this report has described previously, this policy option is costly to the point of challenging feasibility, but research from other jurisdictions predicts it would generate substantial returns on investment and be cost-effective over time. Most research on achievement gaps in school success highlight the intractable nature of such gaps, which are reinforced by intergenerational poverty. High-quality early childhood care and education represents one of the few strategies with the potential to shrink or close the achievement gap.

   Beyond early effects of such care that would increase school readiness and reduce the need for special education and grade retention, and beyond adult outcomes such as increased income and tax revenue and reduced criminal activity, is the potential impact on the workforce and economy as a whole. Some economists have identified high-quality early childhood education as an economic development strategy in and of itself for the way it builds a future workforce that not only has higher rates of education but also has developed the fundamental "soft skills," such as motivation and the ability to stick with difficult tasks.

Table 16, below, arrays the five policy options along a spectrum of cost and return on investment. At the extreme left is the status quo, which is the lowest cost option, but also reaps the fewest benefits. At the extreme right is transformational highest-quality reform, which is the most costly, but promises to generate the largest return on investment. In the middle are an incremental approach; a targeted approach; and a QRIS, which may be either incremental or targeted, both, or neither. The cost and

[48] These cost estimates are comparable to those of Barnett and Masse, in which they estimated $12,000 per-child for their highest-quality option. They explained, "The $12,000 figure is in the ballpark of the costs of programs that research has shown to have large benefits for children in poverty and is the figure that we consider a reasonable goal for public policy." Barnett, W.S., & Masse, L.N. (2003). Funding issues for early childhood care and education programs. In D. Cryer (Ed.), *Early childhood education and care in the USA*. Baltimore: Brookes Publishing Co.

effectiveness of the policy options in the middle of the chart are determined by the choices made as the policies are designed.

Table 16. Comparison of Policy Options

	1. Maintain Status Quo	2. Incremental Improvement	3. QRIS	4. Targeted Intervention	5. Maximize Quality
Realign market forces to incentivize quality	No.	No.	Yes. Creates informed consumers; especially incentivizes quality if policy features tiered reimbursement.	Potentially, but no effect is likely if merely a few model programs are the result.	Yes.
Impact quality across entire marketplace	No.	Yes.	Potentially, may result in greater parental demand for quality.	Not likely.	Yes.
Maximize long-term social and economic benefits	No.	No.	Not likely, but could occur over time if most programs became highly rated.	Not on a wide scale, but individual model programs could generate such benefits.	Yes.
Cost to government	Same as current.	Medium.	Will vary with design, ranging from same to high.	Will vary with design, ranging from medium to high.	High.
Estimated cost per-pupil to run a program (for centers)	$5,625	$8,023	Dependent on whether the goal is to make incremental improvement or maximize quality.	Dependent on whether the goal is to make incremental improvement or maximize quality.	$10,958

Conclusion

Wisconsin's 2009-2011 biennial state budget included the authority for the Wisconsin Department of Children and Families to develop a QRIS policy. The department will present the proposed QRIS rules and regulations to the Legislature's Joint Finance Committee this winter. Because the budget assumed the QRIS would be cost-neutral, the proposed QRIS is likely to be the moderate version, although it could include tiered reimbursement if the reduced subsidies for low-quality providers balance the higher subsidies for higher-quality providers.

Because of the expectation that the QRIS will be cost neutral in the state budget, it is likely that the private sector will be asked to play an important role in financing the policy. This report should help

foundations, employers, and others in the private sector determine the extent, if any, of their investment.

Cost-neutrality requirements for a quality improvement initiative acknowledge that the state government already is an enormous player in the child care marketplace, investing millions in Wisconsin Shares subsidies (and additional funds for the T.E.A.C.H. and R.E.A.C.H. programs for the professional development of caregivers and teachers). The relevant questions are whether these taxpayer dollars can be distributed in a way that incentivizes quality, and whether this large expenditure can create the cost-effective returns on investment that some model programs have been able to achieve.

It is clear that the current early childhood care and education system in southeast Wisconsin is not maximizing the long-term benefits to children or society that can be derived from high-quality care. In fact, taxpayer dollars are being spent in a manner that does nothing to promote the creation of quality care. The fact that some providers have been able to defraud the system to maximize their receipt of Wisconsin Shares subsidy dollars has shined a light on the overall lack of accountability, monitoring and regulation in the system. Moreover, the children who research shows could benefit from high-quality care the most—low-income children—are receiving the lowest-quality care.[49]

The point of this analysis is not to advocate for any particular way in which government should consider investing in early childhood care and education or the size of any such investment. As this analysis has shown, the costs can be tailored to the desired outcomes, and there are positives and negatives associated with each policy option. Policymakers and their partners, the private sector and the public, must weigh the desired benefits versus the costs and determine the most effective and efficient way to reap better outcomes for the region's children and economy.

[49] Adams, Diane, Diana Durant, Dave Edie, Maureen Ittig, Dave Riley, Mary Roach, Stephanie Welsh, Deb Zeman. (2001). *Trends Over Time: Wisconsin's Child Care Workforce.* WI Child Care Research Partnership, University of Wisconsin – Extension. http://www.sohe.wisc.edu/outreach/wccrp/pdfs/trends.pdf

APPENDICES

Appendix 1: Influential Studies

Three carefully controlled longitudinal studies with long-term follow-up on participants make up the core of research on the effects of high-quality early childhood education: the High/Scope Perry Preschool Project, the Caroline Abecedarian Project, and the Chicago Child-Parent Center preschool program.

- **High/Scope Perry Preschool Project**:[50] This random-assignment research began in the 1960s and has featured long-term follow-up on its 123 disadvantaged African American participants, tracking them into adulthood. Years later, the children who attended Perry Preschool as three- and four-year-olds had lower use of special education, higher high school graduation rates (65 percent vs. 45 percent of nonparticipants), lower crime rates, lower rates of being single mothers (57 percent vs. 83 percent of non-participants), and higher earnings in the workforce compared to the group of children who did not attend Perry but were also tracked.

  By age 27, four times as many program participants as nonparticipants earned $2,000 or more per month. Again at age 27, 15 percent of program participants were receiving public assistance, compared to 32 percent of non-participants. They found that while 7 percent of those who attended Perry Preschool became chronic lawbreakers (more than four arrests) by age 27, 35 percent of the group not attending Perry became chronic lawbreakers by age 27. This evidence suggesting that quality early childhood education has the potential to cut future crime, yielding dramatic cost savings.

- **Carolina Abecedarian Project:**[51] This project featured random assignment in the 1970s and '80s, with follow-up studies on participants occurring to this day. The project served 111 children from low-income families from infancy to kindergarten entry. Parents were trained to engage in specific supplemental education activities with their children at home. Compared to the nonparticipant group, participants showed higher academic achievement and IQ, fewer instances of grade retention, and less special education placement by age 15. By age 21, participants showed higher rates of employment in high-skilled jobs, more enrollment in four-year colleges, and lower drug use.

- **Chicago Child-Parent Center (CPC) preschool program:**[52] Using a quasi-experimental design as opposed to the prior two studies' use of random assignment, this study targets Chicago's

[50] Schweinhart, Lawrence. (1993). *Significant Benefits: The High/Scope Perry Preschool Study Through Age 27.* Ypsilanti, Michigan: High/Scope Press.

[51] Source A: Campbell, Frances, Ramey, C., Pungello, E., Sparling, J., and Miller-Johnson, S. (2002). Early childhood education: Young adult outcomes from the abecedarian project. *Applied Development Science*. Vol. 6, No. 1, 42-57. Source B: Masse, Leonard and W. Steven Barnett. (2002). A Benefit Cost Analysis of the Abecedarian Early Childhood Intervention. New Brunswick, N.J.: National Institute for Early Education Research, Rutgers University.

[52] Reynolds, Arthur J., Judy A. Temple, Suh-Ruu Ou, Dylan L. Robertson, Joshua P. Mersky, James W. Topitzes, and Michael D. Niles. (2006). *Effects of a School-Based Early Childhood Intervention on Adult Health and Well-Being: A*

highest-poverty neighborhoods. Started in 1967, CPC programs still operate in Chicago. Each teacher is required to have at least a bachelor's degree, with certification in early childhood education, and salaries mirror those of public school teachers. CPC programs also feature relatively structured instructional activities, low teacher-child ratios and opportunities for parent involvement.

The Chicago Longitudinal Study has been consistently tracking 1,500 children born to low-income families in 1980, with both a Chicago CPC group and a control group which did not attend CPC but did participate in full-day kindergarten. Research suggests that CPC children benefited in many ways compared to non-participants, and that benefits continued into adulthood. CPC children had higher achievement test scores than the control group at ages five, six, nine, and 14. CPC children had less delinquency and higher high school graduation rates.

Economists' Views on Early Childhood Care and Education

Educators and advocates are not the only ones interested in early childhood care and education. Increasingly, economists are studying it for two main reasons: 1) it could mitigate worsening workforce problems in the U.S., and 2) if money is to go to social services and social issues, directing funds to high-quality early childhood education may be the most cost-effective way to invest such funds.

James Heckman, a Nobel Prize-winning economist from the University of Chicago, along with Dimitriy Masterov, have explored why it may be cost-effective to invest in children who are growing up in disadvantaged environments.[53] Adverse environments, they argue, place children at risk for social and economic failure. Instead of making an ethical argument for helping these children, the researchers make an economic-based productivity argument that mitigating the harmful effects of these children's environments benefits not only those children but also all of society.

Currently, society invests substantial funds in interventions like public sector job skills programs for low-income people and GED acquisition programs that seek to remediate the effects of having disadvantaged early years. Heckman and Masterov argue that such programs are costly and ineffective. Moreover, they claim that, because "skills begets skill; learning begets learning," investments in the early years are able to build layers of benefits over many years, yielding a greater return on investment than interventions that take place in later years.

While schooling tends to focus on cognitive skills development, early childhood education develops both cognitive and non-cognitive skills. Non-cognitive skills, such as persistence, motivation, social skills, and ability to manage aggression (self-control), are often key to the ability to graduate high school and get and keep a job.

20-Year Follow-up of Low-Income Families. Early Childhood Research Collaborative Paper Series, August. http://earlychildhoodrc.org.

[53] Heckman, James, and Dmitri Masterov. (2007). "The Productivity Argument for Investing in Young Children." Lecture given at the Allied Social Sciences Association annual meeting. http://jenni.uchicago.edu/Invest/

While the U.S. has come to take growth in the quantity, quality and competitiveness of its workforce somewhat for granted, that is no longer the case. Heckman and Masterov predict that if trends continue, the future workforce will be smaller, less skilled and with a greater portion consisting of individuals from dysfunctional family backgrounds. Meanwhile, global competition and technological advancements demand an even higher level of workforce skill. The researchers conclude, "Enriching the early years will promote the productivity of schools by giving teachers better-quality students. Improving the schools will in turn, improve the quality of the workforce" (p. 35-36).

Arthur Rolnik and Robert Grunewald of the Minneapolis Federal Reserve Bank are two more economists who have turned their eyes to early childhood care and education.[54] Their starting point was a dissatisfaction with the way that traditional economic development supports subsidizing private businesses, which they find does not create jobs but actually only relocates them, pitting one area to compete against another which drives subsidy levels up. Public return on such investments, the researchers argue, is zero. Instead, they promote an investment in human capital.

Rolnik and Grunewald argue that policymakers have a responsibility to identify the educational investments that yield the highest public returns. The literature, they explain, is clear in proving that early childhood education is the most cost-effective investment: "Compared with the billions of dollars spent each year on high-risk economic development schemes, an investment in ECD is a far better and far more secure economic development tool" (p. 28).[55]

[54] Rolnik, Art and Rob Grunewald. (Dec. 2003). "Early Childhood Development: Economic Development with a High Public Return." *FedGazette.* Federal Reserve Bank of Minneapolis. http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3832

[55] Grunewald, Rob and Arthur Rolnik. (Mar. 2006). "A Proposal for Achieving High Returns on Early Childhood Development." Federal Reserve Bank of Minneapolis.

Appendix 2: Estimating Program Need and Participation

This section estimates the population of children in need of child care in the seven-county area.

Determining the Need

In determining the size and characteristics of the population of children in this region needing early care and education services, this report relies upon prior Public Policy Forum research. The May 2009 report, "The Economic Impact of the Child Care Industry in Southeast Wisconsin" used data from the Wisconsin Child Care Research Partnership's Early Care and Education Mapping Project, which in 2006 found that this region contains 74,627 regulated child care slots (Table 17). (Regulated child care, as opposed to informal arrangements, is either licensed by the state or certified by the county.)

Table 17. Regulated Southeastern Wisconsin Child Care Slots by County and Provider Type

	Licensed group provider slots	Regulated family provider* slots	All regulated provider slots
Kenosha	3,979	793	4,772
Milwaukee	31,880	10,868	42,748
Ozaukee	2,452	118	2,570
Racine	4,935	1,218	6,153
Walworth	1,790	235	2,025
Washington	3,570	193	3,763
Waukesha	11,790	806	12,596
7-cty total	**60,396**	**14,231**	**74,627**

Source: WCCRP Early Care and Education Mapping Project. http://ecemap.uwex.edu/index.aspx*, 2006.*

**Licensed, certified, and dually regulated family/home-based providers.*

While the slots represent the child care capacity of the region, not all slots are filled at any one time. It is also important to estimate the number of children actually served in the region. The Public Policy Forum conducted a survey of southeastern Wisconsin licensed and certified child care providers in early 2008.[56] The survey found an average enrollment rate of 89.45% among the region's providers who responded to the survey; thus capacity (the number of available slots) exceeds enrollment (the number of children filling the slots).

Applying the average enrollment rate to the estimated number of slots in the region results in an estimated 66,754 children served by regulated child care in the region.[57]

[56] Public Policy Forum. (June 2008.) Child Care Provider Survey Reveals Cost Constrains Quality. *Research Brief*, 96 (5). http://www.publicpolicyforum.org/pdfs/ProviderSurveyBrief.pdf

[57] That is an estimated 54,071 children in group care, and 12,683 children in family care.

The total number of child care slots also includes slots that may be filled by children older than 5 years, even though our analysis of early childhood care and education in this report focuses on children ages 0 to 5. A more precise figure could be derived from analyzing rates of child care usage according to the age of the child.

SE Wisconsin serves an estimated 66,754 children in regulated child care.

A data complication that is beyond our ability to analyze at this time is the fact that some children only need part-day child care, and some children are in a combination of formal and informal child care arrangements, or a combination of child care and preschool or kindergarten. Knowing these complexities, it is possible that one "slot" reported by a child care provider could represent more than one child using part-day care.

A final caveat worth noting is that, while we are representing the best estimate known at this point in time, demand for paid early childhood care and education can shift with quality and affordability improvements. Subsequent research is needed to increase specificity in these areas.

Appendix 3. Estimated Cost of Upgrading Child Care Quality for a Group Child Care Center

Budget Item	Annual Expense as Baseline Quality Group Child Care Center				Annual Expense as Better-Quality Group Child Care Center				Annual Expense as High-Quality Group Child Care Center			
	Staff	Hourly Wage	Salary	Expenses	Staff	Hourly Wage	Salary	Expenses	Staff	Hourly Wage	Salary	Expenses
Salaries												
Director	1	$14.42	$29,994	$29,994	1	$22.00	$45,760	$45,760	1	$27.13	$56,430	$56,430
Administrative Assistant/Bookkeeper	1	$9.00	$18,720	$18,720	1	$10.00	$20,800	$20,800	1	$11.50	$23,920	$23,920
Teachers	5	$9.58	$19,926	$99,630	5	$13.20	$27,448	$137,240	10	$18.63	$38,750	$387,500
Assistant Teachers	5	$9.15	$19,032	$95,160	8	$11.00	$22,880	$183,040	3	$13.20	$27,448	$82,344
Subtotal	**12**			**$243,504**	**15**			**$386,840**	**15**			**$550,194**
Mandatory Benefits (% of Salary)												
FICA (6.2%)				$15,097				$23,984				$34,112
Medicare (1.45%)				$3,531				$5,609				$7,978
FUTA (0.8%)				$1,948				$3,095				$4,402
WI unemployment (3.25%)				$7,914				$12,572				$17,881
Worker's Compensation (0.83%)				$2,021				$3,211				$4,567
Subtotal				**$30,511**				**$48,471**				**$68,939**
Other Benefits												
Health Insurance ($1,496 per staff)	*(for Director)*			$1,496				$22,440				$22,440
Dental Insurance ($615 per staff)				$0				$0				$9,225
Pension ($2,000 annually per staff)				$0				$0				$30,000
Subtotal				**$1,496**				**$22,440**				**$61,665**
Total Personnel Costs				**$275,511**				**$457,751**				**$680,798**
Personnel cost per child per year				**$3,625**				**$6,023**				**$8,958**
Non-personnel (supplies, food, etc.)												
$2,000 per child (x 76 children)				$152,000				$152,000				$152,000
Subtotal				**$152,000**				**$152,000**				**$152,000**
Total Direct Service Costs				**$427,511**				**$609,751**				**$832,798**
Direct service cost per child per year				**$5,625**				**$8,023**				**$10,958**

Appendix 4: Estimated Cost of Upgrading Child Care Quality for a Family Child Care Program

Budget Item	Baseline Annual Expense for Family Child Care Program			Better-Quality Annual Expense for Family Child Care Program			High-Quality Annual Expense for Family Child Care Program		
	Staff	Hourly Wage	Salary	Staff	Hourly Wage	Salary	Staff	Hourly Wage	Salary
Salaries									
Teacher/Administrator	1	$10.78	$22,422	1	$11.50	$23,920	1	$13.20	$27,456
Subtotal	**1**		**$22,422**	**1**		**$23,920**	**1**		**$27,456**
Self-employment taxes									
Social Security (12.4%)			$2,780			$2,966			$3,405
Medicare (2.9%)			$650			$694			$796
Subtotal			**$3,431**			**$3,660**			**$4,201**
Other Benefits									
Health Insurance ($1,496 per staff)			$0			$1,496			$1,496
Dental Insurance ($615 per staff)			$0			$615			$615
Subtotal			**$0**			**$2,111**			**$2,111**
Total personnel costs per year			**$25,853**			**$29,691**			**$33,768**
Personnel cost per child per year			**$3,232**			**$3,711**			**$4,221**
Non-personnel (supplies, food, etc.)									
$2,000 per child (x 8 children)			$16,000			$16,000			$16,000
Subtotal			**$16,000**			**$16,000**			**$16,000**
Total Direct Service Costs			**$41,853**			**$45,691**			**$49,768**
Direct service cost per child per year			**$5,232**			**$5,711**			**$6,221**

Appendix 5: Center Proxy Budget Assumptions

Budget Item	Baseline Budget for Group Child Care Centers	Better-Quality Budget for Group Child Care Centers	High-Quality Budget for Group Child Care Centers
SALARIES			
Center Director[58]	**Qualifications:** Possess or be working toward the WI Child Care Administrator Credential (Registry level 10). **Wage Estimate:** $14.42/hour[59] ($29,994 annually) **Source for Wage Estimate:** Average wage for the region reported to The Registry. See footnote below.	**Qualifications:** Possess WI Child Care Administrator Credential and would have Associate degree (Registry level 13). Also acceptable: a Bachelor's degree in another field plus a Registry Credential, or a Bachelor's degree in another field plus 30 related credits. **Wage Estimate:** $22.00/hour ($45,760 annually) **Source for Wage Estimate:** Based on feedback from advisors who are close to the industry.	**Qualifications:** Bachelor's Degree or higher and a WI Child Care Administrator Credential (Registry level 15). Also acceptable: Doctorate in another field. **Wage Estimate:** $27.13/hour ($56,430 annually) **Source for Wage Estimate:** The May 2007 Bureau of Labor Statistics report for the Milwaukee-Waukesha-West Allis metropolitan area lists "Education Administrators, Preschool and Child Care Center/Program," occupation code 11-9031. The listed rate of $26.48 per hour was expressed in 2008 dollars.[60]

[58] Director is a role that can take many forms in the child care industry. In this proxy budget, the Director also functions as Administrator/Manager, but in practice these roles are sometimes separate. Also, Directors' roles can be quite different according to whether they oversee more than one site and whether their center is small or large. Efforts have been made to create the most realistic estimates possible for the average center.

[59] Compare this rate (from The Registry's data) to findings of the WI Child Care Research Partnership in its 2003 report "Trends Over Time: Wisconsin's Child Care Workforce," which surveyed 2,000 programs statewide to conclude that the average annual salary for early care and education directors in Wisconsin was $27,000 in 2001 ($32,824, or $15.78/hr. in 2008 dollars).

[60] There is a significant difference between The Registry's data and the Bureau of Labor Statistics' (BLS) data. As the Public Policy Forum noted in its report on the economic impact of child care as an industry in this region (http://www.publicpolicyforum.org/pdfs/ECEBenefits.pdf), BLS and Economic Census data often fail to capture the realities of the industry. Because the BLS data appears to overestimate the average wage, we choose to use it to represent what would be the average wage in a highest-quality system rather than as a baseline.

Center Administrative Assistant/ Bookkeeper	**Qualifications:** High school diploma/GED **Wage Estimate:** $9.00/hour ($18,720 annually) **Source for Wage Estimate:** Based on feedback from advisors who are close to the industry, as well as the assumption that an Administrative Assistant would probably make somewhat less than the wage of an Assistant Teacher.	**Qualifications:** High school diploma/GED **Wage Estimate:** $10.00/hour **Source for Wage Estimate:** Based on feedback from advisors who are close to the industry, as well as the assumption that an Administrative Assistant would probably make somewhat less than the wage of an Assistant Teacher.	**Qualifications:** High school diploma/GED **Wage Estimate:** $11.50/hour ($23,920 annually) **Source for Wage Estimate:** The May 2007 Bureau of Labor Statistics report for the Milwaukee-Waukesha-West Allis metropolitan area lists "Receptionists and Information Clerks," occupation code 43-4171, as making $12.39 per hour in 2007 dollars. Given what appears to be realistic in the industry, the fact that the education requirements are not changing, and based on feedback from advisors, a lower rate of $11.50 per hour is used here. Wages are higher than they were in the baseline and better-quality scenarios due to the overall increased professionalism and organizational capacity of the industry, as well as increased responsibilities related to the quality improvements.

Center Teachers	**Qualifications:** Minimum of two non-credit courses in early childhood education, or 48 higher education credits which include at least 3 credits in early childhood education.[61] **Wage Estimate:** $9.58/hour[62] ($19,926 annually) **Source for Wage Estimate:** Average wage for the region reported to The Registry.	**Qualifications:** Associate Degree in early childhood education (Registry level 12). Also acceptable: a Bachelor's degree in another field or an Associate Degree in another field with 30 related credits. **Wage Estimate:** about $13.20/hour ($27,448 annually) **Source for Wage Estimate:** The Milwaukee Area Technical College Graduate Report 2008 lists graduates with an Associate Degree in Early Childhood Education as making $27,448 annually.[63]	**Qualifications:** Bachelor's Degree in a major relevant to early childhood education (Registry level 14). Also acceptable: Master's Degree in another field, or Bachelor's Degree in another field plus 36 related credits. **Wage Estimate:** $18.63/hour ($38,750 annually) **Source for Wage Estimate:** The May 2007 Bureau of Labor Statistics report for the Milwaukee-Waukesha-West Allis metropolitan area lists "Kindergarten Teachers, Except Special Education" as occupation code 25-2021, making $46,040 annually ($22.98 per hour in 2008 dollars). Some studies recommend paying child care teachers with B.A. degrees the same as public school teachers, but, acknowledging the reduced capacity of this industry, this report has chosen instead to attempt to model what is known about salaries at centers which are a national model for high-quality early childhood education. This report's estimate is based on the salary range of a model high quality provider in Milwaukee, with teacher salaries ranging from between $32,500 for a new teacher and $45,000 for a kindergarten teacher with a teaching license. This report uses the average of $32,500 and $45,000 for the teacher wage.

[61] For more information on what Wisconsin requires in the current system, see http://dcf.wisconsin.gov/publications/pdf/dcf_p_66.pdf.

[62] This rate is comparable to the findings of the Center for Child Care Workforce. Their 2006 report, "Low Salaries for Staff, High Costs to Children: State by State Wage Data for the Early Childhood Education Workforce" showed 2004 earnings for Wisconsin Child Care Workers to be $18,300. Expressed in an equivalent 2008 hourly wage, that is $9.40 per hour. Additionally, this rate is also comparable to findings of the WI Child Care Research Partnership in its 2003 report "Trends Over Time: Wisconsin's Child Care Workforce," which surveyed 2,000 programs statewide to conclude that the average hourly wage for early care and education teachers in Wisconsin was $8 per hour in 2001 ($9.73 in 2008 dollars).

[63] http://www.matc.edu/documents/grad_report08.pdf

Center Assistant Teachers	**Qualifications:** Must have completed one non-credit state-approved course in ECE (or completes that within 6 mo. of assuming the position), or have completed an assistant child care teacher training program, or have completed one relevant course for credit (or be enrolled in the course within 6 mos.).[64] A parent serving as an assistant teacher in a center run by a parent cooperative is exempt from all training requirements. **Wage Estimate:** $9.15/hour[65] ($19,032 annually) **Source for Wage Estimate:** Average wage for the region reported to The Registry.	**Qualifications:** High school diploma/GED and one to two courses in early childhood education, depending on the age of children served, as well as 80 additional hours of tiered training, as specified by The Registry's level 3. **Wage Estimate:** $11.00/hour ($22,880 annually) **Source for Wage Estimate:** Based on feedback from advisors who are close to the industry, as well as the assumption that an Assistant Teacher would probably make somewhat less than the wage of a Teacher.	**Qualifications:** Associate Degree in early childhood education (Registry level 12). Also acceptable: Bachelor's Degree in another field or Associate Degree in another field plus 30 related credits. **Wage Estimate:** about $13.20/hour ($27,448 annually) **Source for Wage Estimate:** Milwaukee Area Technical College Graduate Report 2008 lists graduates with an Associate Degree in Early Childhood Education as making $27,448 annually.
MANDATORY BENEFITS			
FICA	6.2% of salary. FICA is the acronym for the Federal Insurance Contributions Act, which funds Social Security. The funds support retirement income, disability insurance, Medicare, and survivors' benefits.	Same as baseline budget.	Same as baseline budget.
Medicare	1.45% of salary. Medicare is health insurance for people age 65 or older, under age 65 with certain disabilities, and any age with End Stage Renal Disease.	Same as baseline budget.	Same as baseline budget.

[64] Dept. of Children and Families. WI Administrative Code, Licensing Rules for Group Child Care Centers. http://dcf.wisconsin.gov/childcare/licensed/pdf/dcf_p_205.pdf

[65] This rate is comparable to the following two data sources: 1) The 2004 report by the Center for the Childcare Workforce, "Current Data on the Salaries and Benefits of the U.S. Early Childhood Education Workforce" provides 2002 average hourly wage data for Assistant Teachers not possessing B.A. degrees for Dane County ($8.70), Madison ($9.03), and "outside Madison" ($8.37). Their source is data from 4-C Dane County. 2) The 2001 report by the WI Child Care Research Partnership to the WI Early Childhood Association, "Losing Ground or Keeping Up? A Report on the Wisconsin Early Care and Education Workforce, 2001" surveyed providers serving low-income children in Wisconsin. Of the 199 respondents to the survey section in question, 79% of assistant teachers earned less than $8 per hour. The average wage for Assistant Teacher respondents, in 2001 dollars, was $7.06 ($8.11 in 2008 dollars). Since their survey only applied to centers serving low-income children, the overall average would be somewhat higher.

FUTA	0.8% of salary. FUTA is the acronym for the Federal Unemployment Tax Act. The funds support state workforce agencies and unemployment benefits.	Same as baseline budget.	Same as baseline budget.
WI unemployment	3.25% of salary. Funds support Wisconsin unemployment insurance.	Same as baseline budget.	Same as baseline budget.
Worker's Compensation	0.83% of salary. Funds support workers who are injured while working.	Same as baseline budget.	Same as baseline budget.
OTHER BENEFITS			
Health Insurance[66]	Offered only to Director. **Data Source:** The Registry (http://www.t-net.org/Insurance/tabid/87/Default.aspx) offers health insurance to their members at $30.69 per week for Members & Child(ren) ($1,495.88 annually).	Same as baseline budget but applies to every staff member.	Same as baseline budget but applies to every staff member.
Dental Insurance	Not offered.	Not offered.	Offered to every staff member. **Data Source:** The Registry (http://www.t-net.org/Insurance/tabid/87/Default.aspx) offers dental and vision insurance to their members at $11.82/week for Members and Child(ren): ($614.64 annually).

[66] In its 2003 report, "Trends Over Time: Wisconsin's Child Care Workforce," the WI Child Care Research Partnership surveyed 2,000 programs statewide and concluded that 68 percent of child care center teachers received health benefits in 2001. The Public Policy Forum's 2008 survey of SE Wisconsin family- and center-based child care providers found that 19 percent of respondents provided health insurance "for self" and 14 percent provided health insurance "for family" (http://www.publicpolicyforum.org/pdfs/ProviderSurveyBrief.pdf).

Pension[67]	Not offered.	Not offered.	Offered to every staff member at $2,000 each annually. This rate is used in the IWPR methodology as well as that methodology's implementation in Illinois. **Data Source:** Golin, Stacie Carolyn and Anne Mitchell. "The Price of School Readiness: A Tool for Estimating the Cost of Universal Preschool in the States," Institute for Women's Policy Research, 2004. p. 26.

[67] In its 2003 report, "Trends Over Time: Wisconsin's Child Care Workforce," the WI Child Care Research Partnership surveyed 2,000 programs statewide and concluded that 44 percent of child care center teachers received retirement benefits in 2001. The Public Policy Forum's 2008 survey of SE Wisconsin family- and center-based child care providers found that 16 percent of respondents provided retirement benefits (http://www.publicpolicyforum.org/pdfs/ProviderSurveyBrief.pdf).

Appendix 6: Family Child Care Proxy Budget Assumptions

Budget Item	Baseline Budget for Family Child Care Centers	Better Quality Budget for Family Child Care Centers	High-Quality Budget for Family Child Care Centers
SALARIES			
Family Child Care Teacher/ Administrator	**Qualifications:** Three non-credit courses in early childhood education, as required by licensing standards. **Wage Estimate:** $10.78/hour ($22,422 annually) **Source for Wage Estimate:** This rate reflects findings of the WI Child Care Research Partnership put into 2008 dollars. Its 2003 report "Trends Over Time: Wisconsin's Child Care Workforce" surveyed programs statewide to conclude that the average annual net income for a licensed family provider was $18,451 in 2001.	**Qualifications:** Attain Registry Level 9, consisting of either the Infant/Toddler credential or the Inclusion credential. **Wage Estimate:** $11.50/hour ($23,920 annually) **Source for Wage Estimate:** Based on feedback from advisors who are close to the industry.	**Qualifications:** Associate Degree in Early Childhood Education or equivalent. Also acceptable are the intent to complete the Associate Degree within three years, a Bachelor's Degree in another field, or an Associate Degree in another field plus 30 related credits. **Wage Estimate:** $13.20/hour ($27,456 annually) **Source for Wage Estimate:** The Milwaukee Area Technical College Graduate Report 2008 lists graduates with an Associate Degree in Early Childhood Education as making $27,448 annually.[68]
MANDATORY BENEFITS			
Medicare	2.9%	Same as baseline budget.	Same as baseline budget.
Social Security	12.4%	Same as baseline budget.	Same as baseline budget.
OTHER BENEFITS			
Health Insurance	Not used.	Assumption that provider purchases health insurance. **Estimate**: $1,496 **Data Source:** The Registry (http://www.t-net.org/Insurance/tabid/87/Default.aspx) offers health insurance to their members at $30.69 per week for Members & Child(ren) ($1,495.88 annually).	Same as Better Quality Budget.

[68] http://www.matc.edu/documents/grad_report08.pdf

Dental Insurance	Not used.	Assumption that provider purchases dental insurance. **Estimate**: $615 **Data Source:** The Registry (http://www.t-net.org/Insurance/tabid/87/Default.aspx) offers dental and vision insurance to their members at $11.82/week for Members and Child(ren): ($614.64 annually).	Same as Better Quality Budget.