

EARLY CARE AND EDUCATION IN MAINE, 2007 AND BEYOND



Maine Child Care Advisory Council

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EARLY CARE AND EDUCATION IN MAINE, 2007 AND BEYOND

The Maine Child Care Advisory Council is pleased to present this report to the 123rd Legislature on the activities of the Council and recommendations for consideration by the Legislature that will move Maine towards a high quality, affordable early care and education system in 2007 and beyond.

About the Council

The Maine Child Care Advisory Council was established through Maine statute in 1993 to advise the Legislature and the Department of Health and Human Services regarding child care services throughout the state.

The Council's mandate is to encourage the development of child care policies that promote quality, consistency, and effectiveness of child care in Maine; that are coordinated among all state agencies; and that are integrated into a system of comprehensive services for children and families.

Since the development of the council we have focused our efforts on strengthening the early care and education system in Maine through:

1. the development of appropriate child care funding,
2. effective licensing and regulations,
3. adequate training and professional development of the child care workforce, and
4. improvement of the system of resource development centers to reach parents and providers throughout the state.

Specifically, we have provided guidance on:

- ▼ A uniform regulatory system for family child care homes
- ▼ Nursery school regulations
- ▼ Licensing regulations for Head Start programs in public schools
- ▼ Child Care Plus Me and policies to include children with special needs
- ▼ Maine's Early Childhood Learning Guidelines
- ▼ Higher Education opportunities for providers
- ▼ Credentialing of early childhood professionals
- ▼ Articulation agreements between community colleges and the university system
- ▼ Blending training among education and special needs communities
- ▼ Liability insurance for Family Child Care Providers
- ▼ Fire safety in child care programs



Council membership is legislated to include representatives from the following groups and organizations.

Maine Child Care Advisory Council Membership:

Maine Senate	House of Representatives
Office of Child Care and Head Start, Early Childhood Division, DHHS	Department of Economic and Community Development
Maine Family Child Care Association	Maine Child Care Directors Association
Child Care Licensing	Maine Head Start Directors Association
School Age Care Provider	Maine Resource Development Centers
Children’s Behavioral Health Services, DHHS	Department of Education
Office of Integrated Access and Support (OIAS), DHHS	Early Care and Education Career Development Program, Center of Community Inclusion
Local Early Intervention Programs	Parent with a child care subsidy
Office of Substance Abuse	Parent without a child care subsidy
Maine Women’s Lobby	Maine Children’s Alliance
Representative of Maine business	Representative from Maine Native American community

Maine parents have a variety of child care and early education choices throughout the state. Understanding the types of programs—their advantages and limitations-- is essential to understanding the important issues addressed in this report.

Maine’s Child Care Choices and Types of Programs

Choosing an early care and education program is one of the most important decisions parents will make for their child. Often the choice is

overwhelming—it involves choosing a program that is available at the time the parent works, accessible to the child’s home or parent’s work location, appropriate to the child’s age and special needs, affordable given the family budget, and of high quality to

assure a loving, nurturing, stimulating environment. According to renowned pediatrician, T. Berry Brazelton, M.D. *“When a parent gives up a child to somebody else, they go through a real grief reaction. It’s like giving up a part of yourself.”* The Maine Child Care Advisory Council is committed to making the important child care decision one that guarantees the best possible outcomes for every Maine child.

Child Care Centers

Facilities licensed as a child care center serve more than three children under the age of 13 and are not a place of residence. The average child care center in Maine cares for 35 children. Centers often have a more structured schedule and children are grouped according to age. Child Care Centers usually follow regular work hours and may be closed for holidays. Staff in a center must be at least 18 years of age. A Center Director must have experience and/or an educational background in Early Care and Education. Thirty (30) hours of annual training is required for all teaching staff.



Family Child Care Homes

A Family Child Care Home means child care provided in an individual’s own residence. The individual is referred to as family child care provider. The licensed provider can care for 3 to 12 children between the ages of six weeks and 13 years, depending on the age mix and if there is additional help. Beginning in 2008, children under five living in the home will be included as part of the total number of children in the program.

The average family child care home in Maine cares for 11 children and often has mixed age groups. Before getting a license to care for children, providers must take the *"Getting Started in Family Child Care"* course which is offered through regional Child Care Resource Development Centers. Twelve (12) hours of yearly minimum training requirements, in addition to CPR and First Aid, must be maintained. If a person cares for only one or two children they are exempt from license requirements.

Legal Unregulated Child Care

Family, friend and neighbor caregivers are considered "legal-unregulated" if they care for only one or two children in their home. In order to participate in Maine's child care subsidy program these providers must pass background checks. CARE for ME is a program of the Department of Health and Human Services that performs background checks on legal unlicensed providers and maintains a database that is available to parents.

In-Home Care is provided in a child's home by a caregiver hired by the parents, sometimes called a nanny or au pair. This type of care is not regulated by the state. Parents often seek the help of professional au pair services to locate in-home providers from the US or abroad to assist them in background checks, qualifications, and references.

Head Start is a comprehensive early childhood development program for children, ages 3-5, whose family income is at, or below the poverty level. Head Start is also Maine's largest provider of early care and education to children with disabilities and special needs. Comprehensive Head Start services include education, health, nutrition, and social skills. Traditionally Head Start is a part-day, part-year program, operating for 3 1/2 hours to 6 hours per day for 32 weeks a year. Most Head Start programs throughout Maine now offer "wrap around services" which combines Head Start services with child care services to offer full-day, full-year programs for working parents. Head Start is offered in a combination of ways including center-based, home-based, family child care home-based, Early Head Start, and Preschool.

Early Head Start is a family-focused program for children ages birth to three with the same eligibility requirements as Head Start. Maine offers Early Head Start services in centers and family child care homes, as well as through home-based programming in which Head Start personnel come to the child's home to meet with the family.

Nursery Schools and Part Time Programs offer programming to children, ages 3-7, for no more than 3 1/2 hours per day, 2-5 days a week. The preschool program often provides a structured curriculum to an average of 10 children in a group.



Public School Preschool Programs are administered by local public school systems in many areas of Maine and regulated by the Department of Education (DOE). Decisions to implement a four year old program are made by local school units, dependent upon local school board approval. DOE is currently working on standards for schools to follow in implementing the Pre-K program statewide.

DOE works with local school systems to help them apply for a Pre-K program and connects them with community resources. In order to qualify for a Four Year Old Pre-K Program, school districts are required to collaborate with other local early childhood programs such as Head Start, Child Care Centers, Family Child Care Programs, Nursery Schools, and Even Start Programs. These community partnerships can include Pre-K programs--

- In a community location other than the public school and staffed by school personnel.
- Within the school facility but sub contracted to a community partner.
- Provided through a subcontract in an existing community-based program.
- That sends school personnel to a community based program, and others.

Pre-Kindergarten, Child Care, and Head Start

Pre-K partnerships with community-based child care and Head Start programs look different in each community, depending upon existing early childhood resources, available space, and the willingness of all involved to understand the perspective of others and create new ways of serving children and families.

Community Partnerships with Child Care and Head Start Programs are an advantage to any Pre-K program because they can:

- ◆ Increase the capacity of communities to serve more children making a preschool experience available to all children.
- ◆ Result in higher quality learning programs and more cost effective use of resources, materials, staff, and space.
- ◆ Reduce the fragmentation of services for children by allowing families, teachers, schools, and early care practitioners to communicate and support the child's development.
- ◆ Provide quality learning resources and efforts to children in a variety of settings.
- ◆ Result in fewer daily transitions for some children by allowing them to stay in one setting that blends preschool experiences with child care needs.
- ◆ Preserve the health of the child care system in the community while generating additional state funds to educate four year olds.
- ◆ Build understanding and relationships among parents, child care programs, head start programs, family child care programs, nursery school programs, school age programs, family literacy programs, professional development programs and public schools that will support later school success.

For more information on funding community partnerships of child care, Head Start and Pre-K programs, see *Funding Collaborations Guide* at www.maine.gov/dhhs/occhs/publications.htm

Programs for children over the age of five are described below to show the continuum of care in Maine. These program options for older children are not formally addressed in the remainder of this document. The Council recommends that action be taken to support these programs, as well.

School Age Programs are for children 5-12 years old and can be found in a public or private school settings, as well as in recreation centers, child care centers, or family child care homes. There is usually one director and a staff of teachers, all trained in school-age care and related activities. Group sizes are determined by state regulations, and programs are licensed. Some programs run on a school calendar, while others operate year round. School-age care can be provided before school begins, in the after-school hours, and possibly on school holidays and breaks. In some cases, transportation and meals are provided as well.

Summer Programs run in sessions, and can be full-day or part-day schedules. Summer camps usually serve children aged 5-15 years and are licensed by the Maine Department of Health and Human Services. There is a director and a trained staff of counselors and assistants. Some camps specialize in certain areas, such as arts, sports, or science. In some areas of Maine, free summer camp opportunities are available.

12-15 Year Old Programs are diverse programs located across the state that offer unique and exciting activities for this age-group. The Department of Health and Human Services (OCCHS) funds 17 after-school programs for 12-15 year old youth across the state. These programs meet the needs of youth in their area and vary from entrepreneurship training to drama to outdoor activities.



The Facts Speak for Themselves

The Child Care Advisory Council believes that the facts about early care and education programs speak for themselves. Maine should invest in quality child care and other early care and education programs because:

1. The majority of Maine's families with young children uses child care and need it to work. Approximately, 46,000 Maine infants, toddlers, and preschoolers need child care while their parents work.
2. Maine's population is aging and we need every child to grow up to be a successful contributing adult.
3. Ninety percent (90%) of brain development occurs during the first three years of life, making warm, responsive care giving, a stimulating environment, and high quality early childhood education critical precursors to children's readiness for school and success in life.
4. The practice of early childhood education works! The quality of Maine's child care programs has long-term effects on the development of Maine children. Higher quality care provides better developmental outcomes for children from all backgrounds, particularly low income children. These children are less likely to use alcohol and other drugs, abuse or neglect their own children, suffer from poor health, fail in school, and are more likely to enter adulthood with the skills necessary to become highly productive members of society.
5. Quality child care programs attract industry to Maine so Maine employees with families can work.

Child care has become the fourth largest industry in Maine, nearly a \$200 million dollar industry employing about 9,000 Maine residents. Working parents in Maine who rely on licensed child care earn as much as \$860 million annually. It makes economic sense to invest in early childhood programs.

6. Quality child care and other early care and education programs can prevent crime in Maine.

Serious Obstacles Exist

But it is not just the facts that move the Council to advocate for public consideration of an early care and education agenda. There are some serious obstacles that parents and their children face in obtaining quality, affordable early care and education.

- ▶ Maine falls short in the number of licensed child care spaces for its youngest children. There are only 27,600 child care spaces for the nearly 46,000 young infants, toddlers, and preschoolers whose parents work. Approximately 18,400 young Maine children cannot find child care in licensed or regulated programs.

There are waiting lists for every age group, particularly infants. According to the July 2006 Maine Child Care Workforce Climate and Market Rate Report, the number of children on waiting lists for center-based and family child care is over 5,000. Almost half of the children on waiting lists are infants and young toddlers. About 58% of the parents who request referrals for child care are seeking infant and toddler care-- more than request care for any other age group. Over 70 percent of infants and toddlers attending child care spend more than 30 hours a week in care. By contrast, only about 55 percent of preschool-aged children attend care full-time.

- ▶ Quality care and education costs! It is a labor intensive industry, often with overhead costs such as benefits, mortgages, and utilities. To many Maine families, child care expenses have become the second most significant family expense following the mortgage or rent. Some child care programs cost as much as tuition to the University of Maine.

Child care government subsidies reach only 38% of low income Maine children eligible for assistance paying for child care. According to the Department of Health and Human Services, roughly 19% of eligible children are served with the federal

Child Care Development Fund (CCDF) subsidy and 19% get help directly through the Temporary Assistance for Needy Families (TANF) program. New TANF work requirements and higher program costs may further erode the number of Maine children that can get help paying for child care.

- ▶ Some child care programs offer rate discounts but generally the providers themselves subsidize the cost to parents with their own low salaries. Tax credits are the only help most working parents receive.
- ▶ Regardless of the cost, the quality of many child care programs in Maine is far from good. In two recent studies of the quality of child care in Maine, only 25% of the scores in child care centers show “Good to Excellent care.” About 30% of the family child care homes meet the “Good” rating, but 56% only provide “Minimal” care and 14% were scored as “Inadequate.” Caregivers scored poorly on learning activities, basic care, and language reasoning—areas of child care that can be improved with training.

Of the licensed child care spaces available only 7,817 hold Maine Quality Certificates—only 15.5% of all Maine licensed child care programs. As of October, 2007 only 10.5% of Maine’s child care centers hold national accreditation which is an indicator of high quality programming. Barely 3% of Maine’s family child care homes are nationally accredited.

- ▶ It is no surprise that the Maine child care workforce data is equally bleak, especially salaries.

Maine’s child care workforce is lowly paid and has few benefits. It is no wonder that more than 25% of them leave the job every year--a disrupting factor for very young children who need consistent caregivers in their lives. However, this turnover rate is down by 6% from 2002 when 31% of the teachers left the classroom.

Maine has been effective in improving the education and training of the child care workforce in recent years. Several

initiatives funded by the Department of Health and Human Services through the Maine Roads to Quality program (*see below*) have supported child care professionals as they move along a comprehensive career development path.

But like the rest of the nation, the majority of Maine child care teachers do not have a four year college degree: Almost one third of lead teachers (31%) in centers and approximately one-half of classroom teachers have at most a high school diploma. Another 28% of classroom teachers have either a Child Development Associate (CDA) or a two-year Associates Degree. Only 21% of all staff have their degree in early childhood education or a related field.

The highest level of educational attainment for the majority of family child care providers is a high school degree or GED (64%). Nearly a quarter of family child care providers hold an Associate’s degree (23%) and 12% hold a Bachelor’s degree. While the education levels of family child care providers are lower than lead teachers at child care centers, one promising trend is that between 2002 and 2006 the percentage holding a Child Development Associate (CDA) credential increased substantially. In 2002 the percentage of family child care providers with a CDA was 5% and in 2006 the figure had increased to 17%.

Maine’s average child care center teacher salary is \$18,862. Family Child Care Providers have an average annual income of \$26,836. As a workforce, child care providers rank number 596 out of 647 detailed occupations, according to the Maine Department of Labor (Mean hourly wage of \$9.42). That means that 595 other Maine occupations are paid more than child care workers, such as Manicurists and Pedicurists (\$9.72) or Animal Trainers (\$15.55).

Good News—Quality Initiatives are in Place

But there is good news; Maine has made progress in recent years, despite limited resources. We have the knowledge and the know-how to improve quality in Maine's early care and education programs and to assist parents in paying for quality child care. State leaders have supported several critical activities in recent years. They include:

The Maine Early Childhood Learning Guidelines were adopted in March 2005 and are jointly endorsed by the Commissioners of Education and Health and Human Services. *The Early Childhood Learning Guidelines* provide guidance on ways to promote learning opportunities for all children in state-funded Pre-K, Head Start, child care centers, family child care homes, and nursery schools.

The Maine Infant and Toddler Guidelines for Learning and Development assist caregivers as they select activities to support the growth and development of infants and toddlers in their care.

The Maine Quality Certificate is a quality designation designed by Maine that indicates whether a child care program has a national accreditation or credential and/or the staff has education in the early childhood education field. It also provides financial incentives to caregivers and parents. Child care programs that have been awarded a "Quality Certificate" receive a 10% quality stipend through the child care subsidy program. A Maine taxpayer is eligible for a double child care tax credit on their state income tax return if they select a program with a Maine Quality Certificate.

Maine Roads to Quality (MRTQ) The Early Care and Education Career Development Center within the Muskie School of Public Service at the University of Maine is funded by the Office of Child Care and Head Start, DHHS. MRTQ manages a comprehensive career development system for Maine in coordination with the regional Resource Development Centers

(RDCs). Important activities to enhance the quality of care in Maine include the following MRTQ programs:

The Maine Roads Accreditation Facilitation Project provides financial support and technical assistance to licensed family child care providers and child care centers in Maine who wish to seek national accreditation from the National Association for the Education of Young Children (NAEYC) for center-based child care, the National Association of Family Child Care (NAFCC) for family child care providers and the National AfterSchool Alliance (NAA) for school age care providers. Accreditation support includes funding for fees as well as professional development workshops and on-site technical assistance. The MRTQ reports 125 Maine programs have become nationally accredited: 76 child care centers by NAEYC and 49 family child care providers by NAFCC (*1/17/07 Maine Roads Traffic Report*)

The Maine Roads Scholarship Program provides financial assistance to child care providers pursuing a Child Development Associate (CDA); Associates, Bachelor's, or Master's degree; and/or a Doctorate which will lead to opportunities working in child care and other early education programs in Maine. For the school year 2006-2007, MRTQ provided 84 scholarships as of January 17, 2007. In addition, a variety of loans, grants, and scholarships are offered through the Finance Authority of Maine to help pay for education beyond high school.

The Maine Roads Core Knowledge Training offers providers a consistent body of knowledge in early care and education through 180 hours of approved training in specific core knowledge areas. The MRTQ reports 107 individuals have completed the 180 hour Core Knowledge Training program since its creation. (*1/17/07 Maine Roads Traffic Report*)

The Maine Roads Registry and Career Lattice is Maine's child care and early education professional

recognition system. As a Registry member, child care professionals receive recognition for their experience working with children and families, their participation in ongoing training, and their educational accomplishments in early childhood education.

Since its creation, 3,693 child care professionals have become members, reaching about 30% of the early care and education workforce. Among its members, 42.1% have earned an Early Childhood Education degree or Child Development Associate (CDA), and 79.8% have earned a bachelor's degree or higher. *(1/17/07 Maine Roads Traffic Report)*

Maine's Resource Development Centers are a resource for parents and providers throughout Maine's 16 counties. Located in eight regional agencies, the RDCs work with parents to find appropriate, affordable child care; with child care providers to improve the quality of their programs; and with communities to build a stable, affordable supply of early care and education programs. Each year they help over 4,000 families find, evaluate, or pay for child care each year, and help approximately 350 new child care providers go into business. In FY 2004, according to the MRDC report, 1,638 early care and education professionals received 37,502 hours of core knowledge training through the RDCs.

Maine's Infant and Toddler Initiative was created to improve the quality and availability of infant and toddler care. The Initiative developed the Infant and Toddler Learning Guidelines, public service announcements, and literacy training. Another program funded by DHHS is an intensive summer institute available to caregivers to improve the quality of infant and toddler care throughout the state. Caregivers of infants and toddlers can participate in a college course offered by the University of Maine at Farmington and receive equipment grants of \$1,000 to enhance quality for infants and toddlers in their care.

Child Care Plus ME is a collaborative partnership between the University of Maine's Center for Community Inclusion and the Department to offer problem solving assistance and training in working with children with special needs. Child care centers, family child care homes, families, preschools, public schools, and community programs receive consultation, training, and resource information so that they may provide quality experiences to all children, including those with challenging behaviors and with medical, physical, and development disabilities.



No One Child Gets Left Behind

While the economic, social, and educational issues surrounding the care of Maine's youngest children are complex and the funding of child care programs equally complicated, we have learned that none of this matters if one child gets left behind.

Given what we know we must prevent even one Maine infant or toddler being left in the care of someone who is NOT nurturing and caring, who does NOT provide a safe and stimulating environment, who does NOT understand the baby's developmental needs, and who does NOT want to be in a relationship with that baby or toddler for the required 8-10 hours each day. We know if this happens, there is a likelihood that this infant will not thrive, develop, or grow up to be a healthy and successful adult.

The problem is when we look into Maine communities we find, not one, but thousands of infants and toddlers who are not getting the very best care that Maine has to offer.

We invite you to look at the facts about Maine's child care programs and the children in their care.

We ask you to consider the national research about child care classrooms and teachers, and family child care homes and providers. We ask you to recognize the breakthroughs in brain research that have proven the value of the first three years of life.

And we invite you to look at Maine's own studies of child care quality and the child care workforce that specify the weaknesses in our child care system.

Maine parents cannot get and keep a job if they do not have a safe, reliable, affordable caregiver for their child while they work.

What we have learned is that Maine has a very long way to go to offer its child population high quality caring, education, and nurturing by all of its early care and education programs.

State leaders, community advocates, and child care providers themselves have stepped up to the "plate" over recent years to make the most out of available state and federal funding; but it has not been enough. And today we face cuts in existing programs and even further erosion in the fabric of a quality early care and education system for Maine.

What we need is a public commitment to long term investment in a comprehensive early care and education system for young children.

The Council believes that the following recommendations can and will help to secure the valuable pieces of Maine's early care and education system and broaden others--just enough--until Maine and the nation, recognizes the need for the type of public and private investment in early care and education that guarantees a productive and successful future for our youngest children, and for ourselves.



Our Recommendations

Every year the Council looks at the issues of child care quality, availability, and affordability.

The Maine Child Care Advisory Council recommends that Governor Baldacci and the 123rd Legislature develop a partnership with in early Maine's private sector to significantly increase Maine's investments childhood care and education. We recommend that Maine's policymakers adopt new strategies to promote quality early childhood services and increase families access to high-quality programs.

The following recommendations are presented in five distinct but interconnected areas:

1. Helping Maine families pay for child care.
2. Improving the quality of all Maine's early care and education programs.
3. Increasing the supply of quality early care and education programs.
4. Improving the inclusion of children with special needs.
5. Building Maine's infrastructure to support quality early care and education programs.

“With money tight in Maine and with budgets shrinking every year, each dollar invested needs to have a significant impact. The research is clearly showing that investing in quality early care programs is the absolute best way to use funds. The benefit is seen both immediately and in the long-term, and the pay-off is seen by everyone. Crime rates are lowered, graduation rates are raised, businesses benefit from educated and committed workers, and Maine sees a huge return in tax revenue from the increase in the workforce.

The phrase, “invest in kids” is thrown around a lot, but when taken literally, it can be the smartest investment Maine has ever made.”

Source: National League of Cities, September 2004 Network Update published in The New Economics of Preschool: New findings, methods, and strategies for increasing economic investments in early care and education. Dana E. Friedman, Ed.D., Early Childhood Funders' Collaborative. (Author substituted the word “Maine” for “cities.”

Recommendation I. Helping Maine Families Pay for Child Care.

1. **Maintain and Increase Funding:** Maintain the current fiscal year 2007 level of funding for children receiving services and increase the overall investment in early care and education to expand availability of services to children.
2. **Cost to Working Families:** Explore state and federal initiatives to mitigate the impact of the cost of child care on working families

Recommendation II. Improving the Quality of Maine's Child Care Programs

3. **Quality Rating System:**
 - a) Provide support for the implementation of a voluntary quality rating system that is inclusive of all early care and education settings including Head Start, Public Pre-K programs, Center-based and Family Child Care, Nursery Schools and family friend and neighbor care, and that supports providers ability to move through the system while improving the quality of care delivered.
 - b) Revise the existing rate structure so that reimbursement rates for child care subsidies are tied to the Quality Rating System.



4. Licensing Standards: Maine should focus on improving licensing standards as a means of raising quality.
 - a) Support the development of a required pre-service training for all center-based teachers, similar to that required of family child care providers. The Council also recommends using on-line and distance learning opportunities, to meet this requirement.
 - b) Support the mandatory membership of all licensed child care providers in the Maine Roads to Quality registry to increase the capacity of the State to collect workforce data, to increase the ability of licensing workers to access training documentation and to improve the professional development of child care providers.



5. Compensation for Well Educated and Trained Child Care Professionals.
 - a) Provide equitable compensation for equitable credentials. Specifically, look at mechanisms to align early care and education compensation within

the existing legislation that mandates entry-level salaries for public school teachers to include early childhood teachers with the same credentials.

- b) Explore compensation initiatives used in other states to reward ongoing professional development so that these training initiatives will produce long-term improvements in child care quality.

Recommendation III. Assuring Children with Special Needs Access to Quality Child Care Programs

6. Children with Special Needs.

- a) Provide adequate funding for a system of care to support the inclusion of children with special needs in quality child care settings. Review funding requirements of Child Development Services, Children's Behavioral Health, Child Welfare, TANF/ASPIRE, Child Care Development Fund, and Children with Special Health Care Needs to avoid gaps, increase access, avoid expulsion from early educational settings.
- b) Provide funding to provide affordable, quality child care for children whose parents are medically unable to care for them 24 hours a day.
- c) Support higher education in building infrastructure to provide early childhood special education graduate degree programs.

Recommendation IV. Increasing Child Care Available to Maine’s Families

7. Expanding Child Care Centers. The facilities report outlines the need to establish a deep capital subsidy program and/or tax-exempt nonprofit revenue bonds to encourage the expansion of facilities in the child care industry. In addition, the state should consider using its deep capital subsidy program to encourage joint planning for facilities between the school system and early childhood providers, and to finance public school improvements to pre-kindergarten classrooms and playgrounds if such renovations are part of a plan to strengthen the overall fabric of education and care for children birth to five.

Recommendation V. Improving the Maine Child Care Infrastructure to Assure Quality Child Care to Maine’s Children

8. Staffing for the Early Childhood Division
 - a) Increase the State Child Care Administrators position and the State Head Start Collaboration Director position from part time to full time.
 - b) Provide a Subsidy and Eligibility specialist to monitor the 50 sites where child care subsidy determinations are made.
9. Systems Integration. The Council strongly recommends that Maine early care and education programs use common standards for quality programming and the Maine Early Learning Guidelines in curriculum design. Shared commitment among Child Care, Head Start and Public Pre K Programs will meet the needs of families, and strengthen the system of education in our State.

10. Early Care and Education Information System. Increase and expand the Early Care and Education Information System to secure links to child care licensing data, Child and Adult Care Food Program data, the provider registry, child care subsidy payments, the Quality Rating System information, and other related information.
11. Collaboration. Focus on streamlining systems in order to increase the funds available for direct service. Align efforts with the Department of Education and other components of the Early Care and Education system.



The Facts Speak for Themselves



Fact One: Child care is part of the daily lives of thousands of Maine families.

Most Maine’s families with young children use child care and need it to work. Is there enough good, reliable child care available in Maine? The answer is: “no.”

There are 46,000 Maine children under age five who need child care while their parents work; approximately 8,800 of whom are infants. Yet, there are only 27,600 spaces in licensed child care programs for all children under five. Currently, only 2,500 infants are being served. Among the child care programs that keep waiting lists, there are about 5,000 young Maine children who are waiting for licensed child care-- approximately 1,000 of whom are infants. ¹

Looking at the data on Maine’s youngest children with working parents provides a statistical basis for child care in Maine.

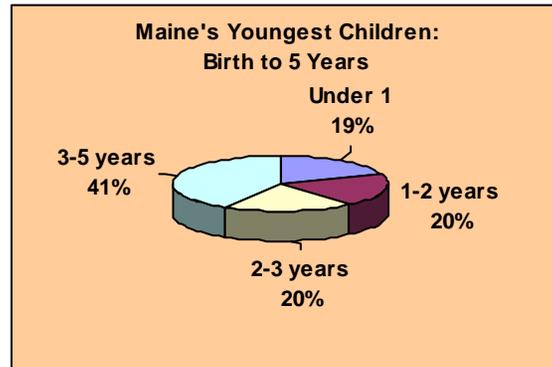


¹ This summary data is referenced in the following pages.

► The Majority of Maine's Youngest Children Need Child Care so Their Parents Can Work

There are more than 70,700 children under 5 years of age in Maine.² Twenty percent of these are babies--approximately 13,500 are infants less than one year of age and close to 28,000 are toddlers between the ages of one and three years.³

Children Under 5 years old	Infants less than 1 year	Toddlers 1 -2 years old	Children 2-3 years old	Children 3-5 years old
70,726	13,456	14,013	13,984	29,273



² US Census 2000. We use the 2000 census data because the preponderance of other data analyses referenced in this report use 2000 census data rather than interim population surveys. Population statistics in the subsequent years (2000 to date) have changed minimally and do not alter the assumptions/conclusions based on the 2000 data.

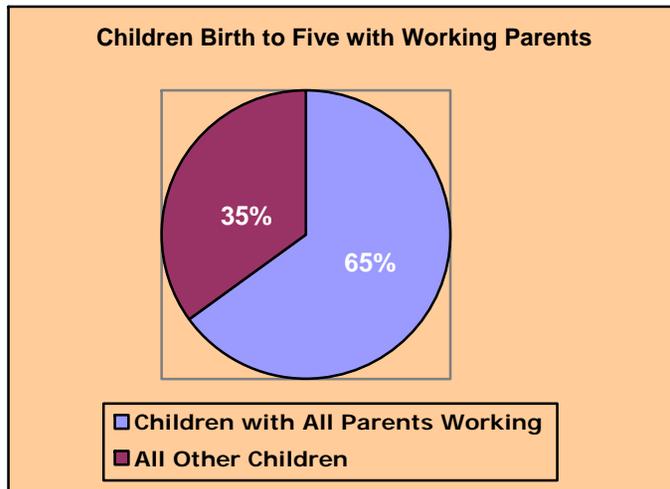
³National Infant & Toddler Child Care Initiative. Maine Key Facts About Children Birth To 3 Years, Their Families, and the Child Care System that Serves Them.



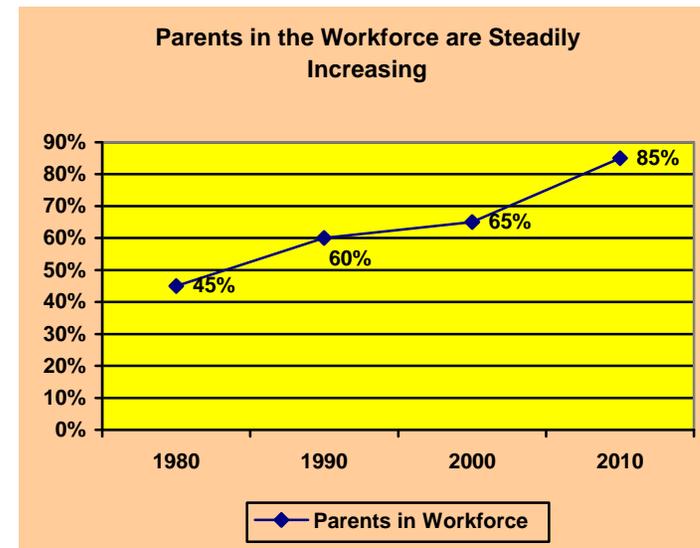
The Number of Maine Children with Working Parents

The economics of living in Maine versus living in states with greater populations, less harsh winters, and more industry—added to the impact of national issues such as the ever-increasing cost of fuel--have forced more and more Maine parents to work to support their families, prepare for their futures, and if possible, enjoy some of life's financial rewards.

Sixty-five percent (65%) Maine's infants, toddlers, and preschoolers have working parents—that equates to approximately 46,000 children under the age of five who need child care while their parents work. That is nearly 27,000 infants and toddlers.⁴



The number of children with parents in the workforce has been increasing steadily since 1940 and will sky rocket by 2010 to 85% of children with parents in the workforce.



⁴ US Census states that 65% of children under the age of SIX have all parents in the labor force. We use the 65 percentile to extrapolate the number of Maine's children under 5 years old with all parents working.

Working Families and the Cost of Child Care

Getting By: Maine Livable Wages in 2004 offers estimates of what it costs Maine families to make ends meet in today's marketplace and what they need to earn to meet those costs. Prepared October 2005 by the Maine Center for Economic Policy, this report established Maine's "livable wage" based on a basic needs budget or market-basket analysis that accounts for actual living expenses and "self-sufficiency" living. The livable wage is calculated by dividing the total expenses in a basic needs budget by the number of hours that make up a year of full time work. Most basic needs budgets include the same seven expense categories: food, housing, transportation, health care, child care, clothing and personal care, and taxes.⁶

- In the livable wage budget for a family of three in Maine, with one working parent and two children in child care, the required annual income for this family to meet their basic needs is \$37,759, three-quarters of Maine's median income.
- According to Maine's Network of Child Care Resource Development Centers, in February 2006 the average cost for full-time infant child care in a center was \$7,802—more than 20% of this family of three's income. If the second child is a four year old, child care (\$6,609) could take almost 38% of the livable wage (\$38,800), further eroding this family's financial well-being.

⁵ Numbers are rounded off. Source: US Census and Extrapolation. The numbers of children of working parents are based on 65%. The numbers of children in poverty is based on a source that state's 27% are poor.

⁶ The Maine Center for Economic Policy. *Getting By: Maine Livable Wages in 2004*. October, 2005. <http://www.mecpep.org>.

► How Many Child Care Spaces are Available for Maine's Youngest Children?

County specific data is helpful in planning for child care programs throughout the state. The following table shows the number of children birth to five years old by county compared to the number of children with working parents. The number of children living in poverty per county is helpful in establishing where affordable child care could help low income working parents move out of poverty. It is important to note the calculation for the number of young Maine children with working parents (65% of birth to 5 year olds) doesn't take into account the number of children of parents who seek child care for school and training, catastrophic family problems, child disabilities and special needs, or child protection.

Maine Counties	Maine Children Birth to 5 Years Old	Children under 5 with All Working Parents	Children under 5 Living in Poverty
Androscoggin	6,122	3,980	1,653
Aroostook	3,730	2,424	1,007
Cumberland	15,443	10,038	4,170
Franklin	1,514	984	409
Hancock	2,516	1,635	679
Kennebec	6,388	4,152	1,725
Knox	2,082	1,353	562
Lincoln	1,621	1,054	438
Oxford	2,895	1,882	782
Penobscot	7,768	5,049	2,097
Piscataquis	826	537	223
Sagadahoc	2,153	1,399	581
Somerset	2,883	1,874	778
Waldo	2,042	1,327	551
Washington	1,727	1,123	466
York	11,016	7,160	2,974
Total⁵	70,726	45,972	19,095

The Number of Child Care Programs in Maine

There are 2,359 licensed child care programs in Maine: 709 child care centers and 1,650 family child care homes.⁹ The number of child care centers and family child care homes in Maine varies depending on business openings and closings.

We do not know how many of Maine's children with working parents are being cared for by family members or friends and neighbors—these caregivers are outside of the regulatory system. They are not required to be regulated if they care for no more than two children. Of the 8,500 children receiving subsidy through Maine's Child Care Development Fund child care subsidy program about 12% of these children are being cared for by family, friends, or neighbors.

There are simply not enough spaces in licensed child care programs for the large number of Maine's children that need early care and education.

Distribution of Child Care Programs across the State

Most of the early care and education programs are located in highly populated areas, which also tend to have the most jobs. The

majority of child care centers in the state are in Androscoggin, Cumberland, Kennebec, Penobscot, and York counties. Further analysis shows that there are often a disproportionate number of child care programs in counties with the highest population.

Maine County	Population Estimates ⁷	Child Care Centers	Family Child Care Homes	Total Centers and Homes
Androscoggin	108,039	60	220	280
Aroostook	73,240	27	100	127
Cumberland	274,950	184	300	484
Franklin	29,704	18	48	66
Hancock	53,660	29	53	82
Kennebec	120,986	65	198	263
Knox	41,219	14	37	51
Lincoln	35,240	21	40	61
Oxford	56,628	41	60	101
Penobscot	147,068	68	139	207
Piscataquis	17,674	5	15	20
Sagadahoc	36,962	24	52	76
Somerset	51,667	21	75	96
Waldo	38,705	18	55	73
Washington	33,448	15	27	42
York	202,315	98	230	328
Unidentified		1	1	3
Total⁸		709	1650	2360

⁷US Census 2000 Population Estimates

⁸ Digital Research, Inc. and Diane Schilder. *Maine Child Care Workforce Climate Report and Market Rate Analysis*. July, 2006.

⁹ For the purpose of this document, we are using the data from the July 2006 Maine Child Care Workforce Climate Report and Market Rate Analysis, commissioned by Maine's Office of Child Care and Head Start within the Department of Health and Human Services. Required by federal legislation every two years, the Market Rate Survey is used to determine the child care rates being charged throughout Maine and to access information about child care utilization and type of care available. The July 2006 Maine Child Care Workforce Climate Report and Market Rate Analysis was prepared by Digital Research, Inc. located in Kennebunk and early childhood specialist Diane Schilder, PhD with Evaluation Analysis Solutions, Inc. from Cambridge, MA.)

Maine's Child Care Offers Little for Non-Traditional Work Schedules

Based on the workforce report, the majority of child care centers in Maine offer full time, full day child care programs operating on average, 5 days a week and 48 weeks per year. Family child care programs are open approximately 49 weeks per year.

These types of programs meet child care needs of parents who work traditional days and hours, but leave very few options for families who work weekends, or late night, early morning, or overnight hours—often the kinds of jobs available to low income parents.

Only 14% of family child care providers say that they provide evening care; 6% provide overnight care, and only 7% provide weekend care.

Only 35% of Maine's child care centers and 42% of family child care homes open earlier than 7:00 AM. There are very few programs that remain open after 6:00 PM.¹⁰

Often child care centers adapt their hours to parent's working hours by providing part-time or part-day child care:

- 55% of the children in these programs are being cared for less than 30 hours per week
- 52% of those children are in child care less than 19 hours per week.

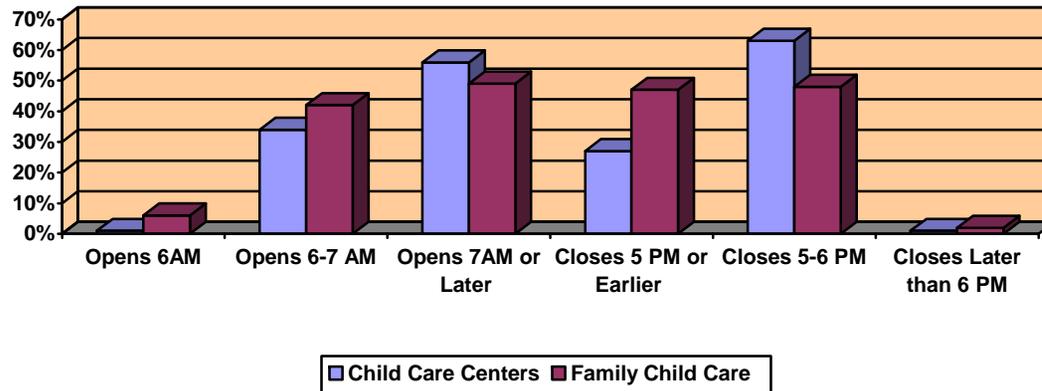
Family child care programs provide similar care—

- 59% of their children are enrolled in full-time care.
- 41% of children are being cared for less than 30 hours per week



¹⁰Workforce Report using July 2006 data.

Maine Child Care Offers Little for Non-traditional Work Schedules



The Number of Children Currently in the Early Care and Education System in Maine

According to the Department of Health and Human Services, there are approximately 27,578 licensed child care **slots** in centers and family child care homes in Maine for children ages 0-5.

The age groupings of children ages 0 to 13 in child care are evenly distributed:

Of the children attending child care:

- One third is school-aged,
- One third is preschool-aged, and
- One third is infants and toddlers.

Of the children attending child care in Maine, infants are the most likely group to be in care full time, 30 hours or more.

Over 70 percent of infants and toddlers attending child care spend more than 30 hours a week in care. By contrast, only about 55 percent of preschool-aged children attend care full-time. And, as expected less than half all school-aged children attending child care spend more than 30 hours a week in child care.¹¹

Ages of Children in Care

Slightly less than half of all infants and young toddlers in care (48%) attend centers with the remaining infants and young toddlers attending family child care (52%). By contrast, nearly 70 percent of preschool-aged children attend centers, with only about 30 percent attending family child care homes.¹²

¹¹Workforce Report using July 2006 data.

¹²Workforce Report using July 2006 data.

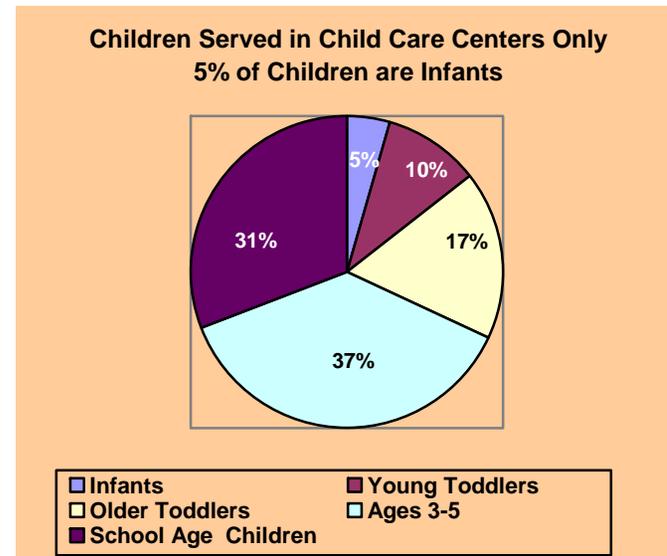
Children in Child Care Centers¹³

Child care centers are least likely to serve infants—only 42% care for infants.

Consequently, only 5% of children in center-based care are infants even though infants make up 19% Maine children five and younger.

This presents a problem for working parents of infants. In the centers surveyed (55% of all centers) served 803 infants. The estimated number of infants enrolled in licensed centers in Maine is 1,395. Of the estimated 8,800 infants of working parents that need child care less than 16% are in a licensed center.

Eight in 10 centers (80%) said that they serve preschool-aged children (more than 3 years of age but not yet 5). Preschool-age children account for the largest proportion of children being cared for in the child care center system (41%).



Children in Family Child Care¹⁴

The majority (70%) of family child care programs serve infants ages 6 weeks to 12 months.

But even family child care programs serve this age group less frequently than other age groups. According to the 2006 workforce report, there are 10,157 children in 1,051 of Maine's family child care homes (64% of total). Only 8% of all children in the family child care system are infants.

School-age children account for the largest proportion of children being cared for in the family child care system (35%), followed by

¹³Workforce Report using July 2006 data.

¹⁴Workforce Report using July 2006 data.

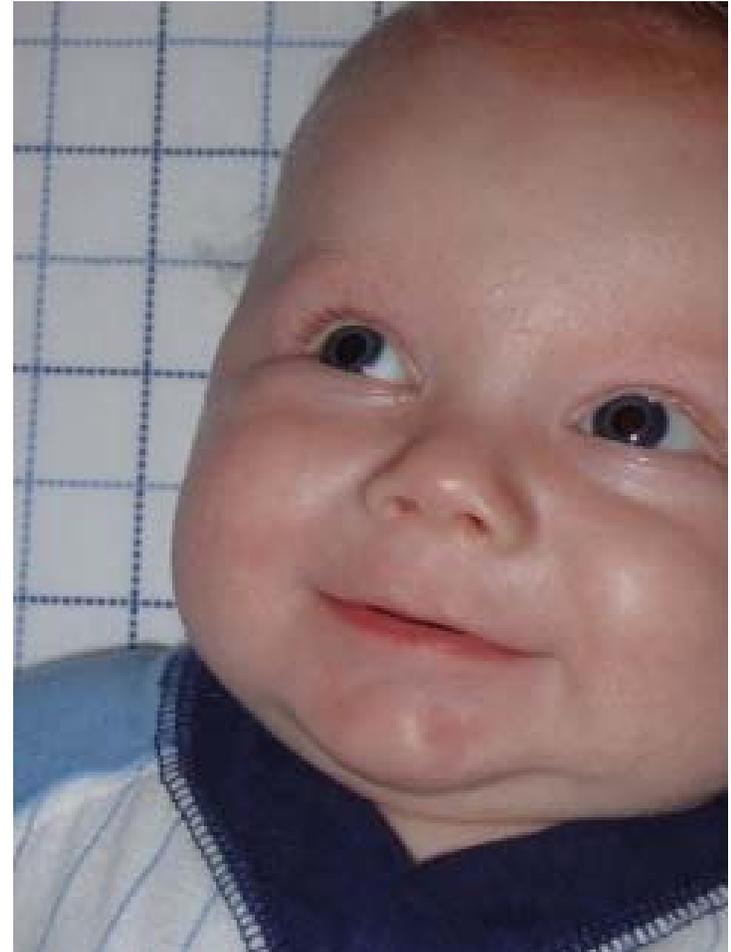
preschool-age children (26%), young toddlers (17%) and older toddlers (14%).

More than eight in 10 family child care homes (88%) indicate that they serve preschool-aged children (more than 3 years of age but not yet 5). This is followed by school-age children (84%), older toddlers (83%), and young toddlers (82%).

This data asks the question:

***Where are our infants receiving child care?
Currently, Maine does not have a definitive answer.***

Age Group	Number Children on Wait List	Percent Children on Wait list
Infant	1,549	27%
Young Toddler	1,199	21%
Older Toddler	846	15%
Preschool	1,455	26%
School-age	601	11%
Total	5,650	



■ **Waiting Lists—Who Waits for Child Care?**

There is no surprise that there are waiting lists for every age group, particularly infants, since Maine falls 40% short in the number of licensed child care slots.

More infants (27%) than any other age group wait for licensed child care.¹⁵

As more and more parents with infants have gone to work, the demand for infant child care has increased. Parents need infant and toddler care (58%) more than care for any other age group. Approximately 16,525 requests for child care were made to regional child care resource development centers--74% were for full time care, and 6% were for non-traditional hour care.¹⁶ Demographic trends suggest that in the absence of an increase in the supply of child care, waiting lists are likely to increase in future years.

There are two types of waiting lists for child care in Maine:

(a) Children who are placed on a waiting list for a space in a child care program that meets their needs for hours, cost, type of care, and location; and

(b) children placed on a waiting list for subsidized child care. The demand for infant care has increased in recent years

According to the 2006 Workforce Report, the number of children on waiting lists for center-based and family child care is over 5,000. Unfortunately, not all centers and homes actually keep waiting lists—a consistent trend found in the 2002 and 2004 surveys. In general, 62% of centers and 41% of family child care programs keep a waitlist. Almost half of the children on waiting

¹⁵ *Workforce Report using July 2006 data.*

¹⁶ *Maine's Network of Child Care Resource Development Centers, 2006.*

lists are infants and young toddlers (48%), revealing that access to care for these age groups is a problem.¹⁷

Waiting Lists at Child Care Centers and Family Child Care Homes¹⁸

In general, 62% of centers keep at least one waitlist but only 41% of homes keep wait lists. At least 65% of the centers and 40% of family child care homes report wait lists for infants.

Wait lists by Age Group	Percent of Programs		Number of Children	
	Centers	Homes	Centers	Homes
Infants	65%	40%	787	762
Young Toddlers	57%	26%	686	513
Older Toddlers	49%	19%	501	338
Preschoolers	54%	14%	1,192	263
School Age	29%	12%	351	250

Maine Children on the Wait List for Subsidized Care

Maine offers financial assistance for low income parents who need child care through:

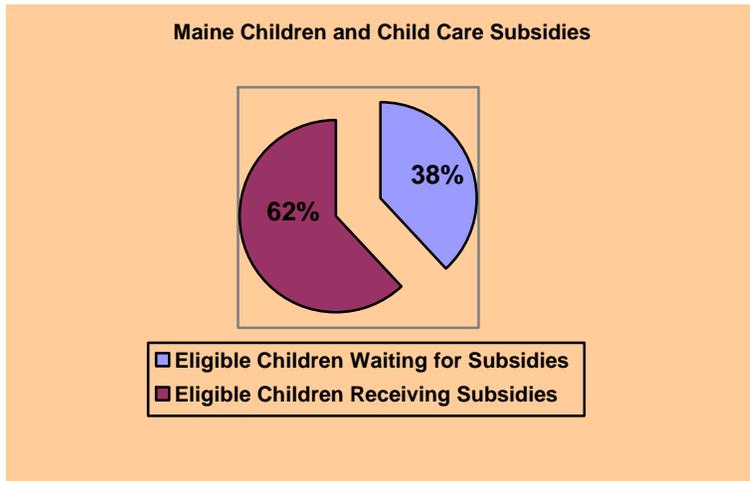
- (a) direct child care vouchers and
- (b) subsidized contracted slots in 42 different child care programs throughout the state.

This system allows for maximum parental choice for child care among a variety of programs and individuals who accept vouchers and specific center-based programs and family child care networks that have a contractual relationship with the Department.

¹⁷ *Workforce Report using July 2006 data.*

¹⁸ *Workforce Report using July 2006 data.*

Despite the investment of federal and state dollars, Maine's subsidies reach only about 38% of the children who are eligible.¹⁹



The Department of Health and Human Services (DHHS) must maintain waiting lists of families if a voucher is not available at the time the parent applies. The list must be updated no less than every six months. Often when low income parents hear about a wait list they don't bother to apply making it difficult to estimate the number of children who aren't being served with subsidized child care.

Contracted slot agencies also must maintain a waiting list. Families transitioning off the federally funded Temporary Assistance to Needy Families (TANF) program must be served when they referred and can not placed on a waiting list as long as funding is available. (The funding is called TANF Transitional Child Care) Children with special needs and very low income families (less than 100% of the poverty level) are considered top priorities, then all others are served on a first-come, first-served basis.



¹⁹ DHHS data.

▶ How Many Maine Children Attend Head Start Programs?

Maine Head Start serves more than 4,000 children annually in eleven regional programs and three Tribal Head Starts. *Maine Kids Count* published by the Maine Children's Alliance estimated that in 2006 there were 12,499 children eligible for Head Start in Maine. They estimated that 8,526 eligible children or 68.2% were not being served.²⁰

Head Start funding provides free early care and education to low income families. Eligibility is based on family size and income. Maximum eligible income for a family of four is \$20,650. Families receiving Temporary Assistance to Needy Families (TANF) or Supplemental Security Income (SSI) are automatically eligible.²¹

Since 1985 state funds have supplemented federal funds to expand Head Start to additional eligible children. Federal guidelines require that no more than 10% of children enrolled are over 100% of the federal poverty level, but with the state funding, 35% of the children can be over the federal poverty level. In Maine, 300 more children are able to benefit from the program due to state money.²²

²⁰ Maine Children's Alliance. *Maine's Kids Count 2006*. Augusta, Maine.

²¹ *Head Start in Maine*, Maine Head Start Collaboration Office, DHHS, 2007.

²² DHHS Head Start Performance Data Base, 2007.

In addition to state funding (\$2,375,786) for Head Start, the Fund for Healthy Maine (\$1,565,765 of tobacco settlement funds, FY08) provides full-day full-year early care and education. Through a comprehensive system of Head Start and child care collaboration, full-day, full-year Head Start programs that meet the needs of working parents are available in most counties.

The majority of children (ages 3-5) in Head Start attend part day (58%) full day, (24%). The vast majority (71%) of infants and toddlers children (birth-three) in Early Head Start receive their program through home visitors who come to the child's home with only 17% in center-based full day Head Start.²³

While the majority of Maine children in Head Start are preschoolers in a center-based program (76%), services can be combined in a variety of options to meet the specific needs of Maine families.

Approximately 4% of the Early Head Start children and 3% of the preschool children are served in family child care programs - also called *Home Start*. Another 4% of Early Head Start and 8% of preschoolers are served through public school partnerships with Pre K.²⁴ (*Source: Head Start Association brochure*)

Head Start is also Maine's largest provider of early care and education to children with disabilities and special needs. On average 25% of enrolled children have a diagnosed special need such as speech/language impairments, non-categorical/developmental delay, and/or emotional/behavioral disorder.²⁵

²³ *Head Start, Program Improvement Reporting Data, 2006*

²⁴ *Maine Head Start Association brochure, 2003*

²⁵ *Ibid.*



▶ How Many Maine Children are in Public Pre Kindergarten Programs?²⁶

In 1981, Title 20-A, Maine Education and School Statutes, Chapter 213: Student eligibility, Section 520, sub. Section 2 (c) was enacted which allowed a child who was at least 4 years old on October 15th of the school year to be enrolled in a 2 year early childhood program prior if one was offered. At least 39 states currently offer a public pre kindergarten program. Maine is one of six states that fund public pre-K experiences through the school funding formula. Vermont, Oklahoma, Nebraska, Wisconsin and West Virginia are the others.

In 1983-84, the Department of Education began offering two-year Early Childhood Program grants (requiring matching funds) to school administrative units for the start-up of Early Childhood Programs. The two-year grant programs continued from 1983-84 through 1990-91 assisting 74 school administrative units in developing Early Childhood programs. Some of these early programs were demonstration sites for the renowned Perry Preschool High Scope Curriculum.

Starting in 1991-92, state funds for start-up costs were no longer available but General Purpose Aid continued for existing and new approved programs. Many school administrative units chose not to

continue these programs. By 1997-98, there were only 27 four year old programs offered throughout the state.

Maine has 288 School Administrative Districts and 556 elementary schools. Today, there are 108 programs in 88 school districts throughout Maine. By 2003-04, there were 84 Programs operating in 69 districts. By 2004-05 there were 91 Programs operating in 76 districts. Today, there are 110 programs throughout Maine. Of the 110 public school pre-K programs currently operating, at least 32 programs (29%) involved community partnerships or contracts to provide full time full day care.

According to the Department of Education some of the reasons for renewed interest in public school programs for four- year-old children include:

- 🖼 Educators and the public are interested in applying early brain development research and exploring the role schools play in that area.
- 🖼 Awareness is increasing around topics such as readiness, equity, and cost benefits of early learning opportunities.
- 🖼 The ability to access the state share of funding has made it more financially feasible for local districts to fund the public school programs for four-year-old children.
- 🖼 Declining enrollment in some districts has made more space available in school buildings.
- 🖼 Parents are looking to their school districts to provide early education opportunities for their four-year-old children.
- 🖼 Kindergarten teachers are indicating that children are entering kindergarten with a wide range of early childhood experience.
- 🖼 A belief that early intervention leads to a greater likelihood of success in schools.

²⁶ Maine Department of Education. <http://www.doe.me.gov>.

 **Fact Two: Maine's Population is Aging and We Need Every Maine Child to Grow up To Be a Successful Contributing Adult**

As Maine's elderly population increases, it is more important than ever to make certain that Maine's young children become the successful, contributing adults of tomorrow.

The retirement of the baby boom generation will put great pressure on federal, state, and local budgets in coming decades; thus, we should invest in Early Care and Education programs to provide future budget relief.



Maine's Shifting Demographics from 2000 to 2030²⁷

Maine's population is aging; the percentage of Maine's youth is declining faster than in other New England states. The rates of population growth occurring throughout Maine counties remain slow. Gradual changes in birth rate, death rate, people moving to Maine, and people leaving Maine contribute to the shift in population and play out differently in each Maine county. Migration trends, especially, depend on the economic health of Maine.

All of these changes are predicted to have a negative affect on Maine's labor force and its ability to sustain a healthy economy. A change that could leave Maine in a poor economic condition, unless we follow the advice of economist Robert G. Lynch and invest early in children and prepare them for the economic burden they face.

"Less skilled, less productive, and earning less, poor under-educated children will be less able to help sustain our public retirement benefits systems such as social security, one of the most challenging problems we face. "

Economist Robert G. Lynch, Washington College

Third Highest Median Age in the Nation

In 2000, Maine had the third highest median age (38.6) preceded only marginally by Florida (38.7) and West Virginia (38.9). According to the report, *Whiter Maine's Population*, Maine's growth in elderly population is likely the result of natural factors such as longer life expectancy (sharp rise in the number of "very old" i.e., age 85+); the fact that elderly are less mobile than younger adults; and the state's growing capacity to attract a stable elderly

²⁷Mageen, D.M., AvRuskin, G., and Sherwood, R. *Whiter Maine's Population*. *Maine Policy Review*, Vol. 9 No. 1. 2000. (This section is excerpted from their report.)

population, especially in southern and coastal counties where access to health care are greater.

The Number of Children Continues to Drop

Children continue to make up a smaller share of the State's population. There were 9000 fewer children in Maine in 2000 than in 1990. Nationally, the number of children (ages 0 to 17) increased by 13% while declining by nearly 3% in Maine based on the US 2000 Census. Maine diverges sharply from the national trend largely due to the increase in Hispanic and other ethnic minorities in other parts of the US.

The greatest decline is among children under age 10 and especially among children under 5 years of age. Maine's population of children birth to age 5 is projected to decrease by 5.5% from the last documented Census (2000) to 4.6% in 2030. This is not surprising since Maine—a long time retirement destination—joins Vermont with the lowest birth rates in the nation (10.6 per 1000). In 1995, Maine was ranked forty-second among the fifty states in its proportion of youth and, in 2025, it is expected to be ranked forty-ninth—almost dead last.

The “Baby Boom” Generation Will Overwhelm the Working-Age Population

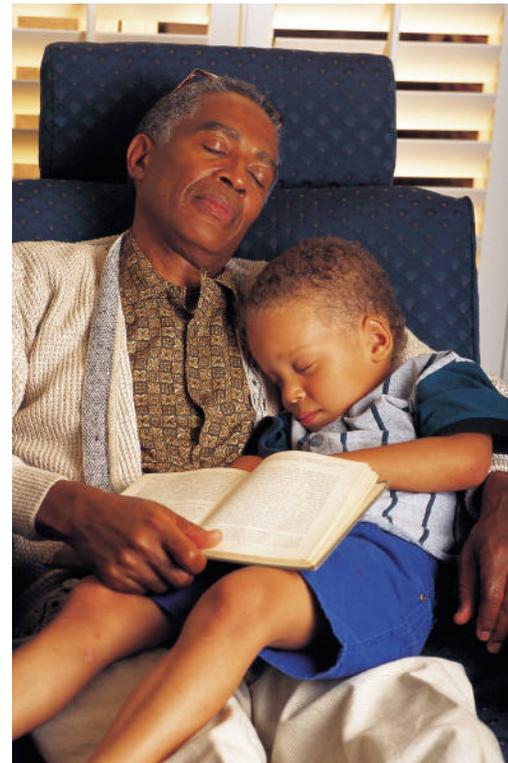
A “baby boomer” is someone who was born during the period of increased birth rates when economic prosperity rose in many countries following World War II. It is commonly applied to people with birth years after World War II and before the Vietnam War (between 1946 and 1964.)²⁸ The baby boom generation begins to turn sixty-five in 2011.

The growth of Maine’s population sixty-five and over will increase from 14.4% (2000) to 21% by 2025. They will swell the ranks of the elderly and overwhelm the working-age population. The labor force will come mostly from the “baby bust” population--people born in the 1970’s and others who are part of the “Generation X.” born between 1965 and 1977.²⁹

Maine’s Labor Force Will Shrink

Maine’s labor force will shrink as the baby boom generation grows older and they begin to leave the workforce and join the ranks of the dependent population. An aging workforce and the shrinking of available labor will affect Maine’s ability to generate resources and income. There is nothing to suggest that birth rates or death rates will change significantly in the future. Migration has the potential to alter rates of growth and change Maine’s population only slightly.

But existing slow growth, a reduction in the number of children and youth, and the aging of the population leaves Maine in a precarious position, evoking the urgency to plan for the early care and education of Maine’s children.



²⁸ www.wikipedia.com

²⁹ www.wikipedia.com

Fact Three: A baby's brain develops to 90% in the first three years of life—a time when nurturing care and education can make the difference between future success and failure. The first three years are critical.

"The growing understanding of how the brain works will have profound implications for human kind that will likely exceed in importance the germ theory of disease."³⁰

The new insights have begun to infuse new passion into the political debate over early education and child care.³¹

³⁰ R. Kotulak *Inside the brain: revolutionary discoveries of how the mind works. Prev Med. 1998 Mar-Apr; 27(2):246-7.*)

³¹Unless otherwise stated, much of this section was excerpted from the article "Fertile Minds" researched and written by TIME Senior Science Correspondent, J. Madeleine Nash and published in a 1997 TIMES Magazine Special Report, "HOW A CHILD'S BRAIN DEVELOPS—And What It Means For Child Care and Welfare Reform.



Insights into Brain Development

Typically, people in Maine are most concerned about the development of a child's brain when he or she goes off to school at the age of 5 or 6—sometimes age 4 for parents who use Pre-K. Yet, last year alone, 14,150 babies were born in Maine ready to begin “the miraculous process of wiring their brains for a lifetime of learning.”³²

For the past decade or more, research into the way an infant brain develops has been the focus of quality

“There is a mind in the crib, requiring stimulation to thrive.”

improvements in early childhood programs. Modern neuroscience has finally provided the proof to support what early childhood experts had seen--that early childhood education, nurturing, and high quality care is key to a child's success later in life. Research has proven that it is even more important to children who are deprived of these experiences in their homes.

These new insights into brain development are more than just interesting science. They have profound implications for parents and policymakers. In an age when mothers and fathers are increasingly pressed for time--and may already be feeling guilty about how many hours they spend away from their children--the results coming out of research are likely to increase concerns about leaving very young children in the care of others.

At birth a baby's brain contains 100 billion neurons, roughly as many nerve cells as there are stars in the Milky Way.

Yet, Maine child care providers often spend more waking hours

³² Nash, J. Madeleine. “Fertile Minds.” *Time* Special Report 3 Feb. 1997. <http://www.time.com/time/archive>. All quotes in this section are taken from this source.

with children than their own parents--and with children as young as 6 weeks old. These infants are even more likely to be in full time care than older preschoolers.³³ There is an urgent need for preschool programs designed to boost the brain power of youngsters born into impoverished households. Without such programs, curtailing welfare costs by pushing mothers with infants and toddlers into the work force may well backfire.

Deprived of a stimulating environment, a child's brain suffers. Researchers at Baylor College of Medicine, for example, have found that children who don't play much or are rarely touched develop brains 20% to 30% smaller than normal for their age.

The old adage, “use it or lose it” forewarned us of the amazing infant's brain. The experiences of early childhood have the most powerful and enduring effects on brain organization and functioning.

Yet, those few resources that are dedicated to early childhood tend to be inefficient and unfocused.³⁴

How a Brain Develops

The researchers discovered more than even they imagined. Babies know more, and know it sooner. The infant's brain begins to develop

A brain is not a computer. Nature does not cobble it together, and then turn it on. No, the brain begins working long before it is finished. And the same processes that wired the brain before birth also drive the explosion of learning that occurs immediately afterward.

³³ Maine Child Care Workforce Climate Report and Market Rate Analysis, July 2006

³⁴ Nash attributes to Perry (2000)

in utero from just a few cells. They multiply wildly and make connections that may shape a lifetime of experience.

The rhythmic firing of neurons is no longer assumed to be a by-product of building the brain but essential to the process. Neurons carry electrical messages through the nervous system and the brain transmitting coordinated waves of neural activity and patterns that over time will enable the newborn infant to perceive a father's voice, a mother's touch, and a shiny mobile twirling over the crib. The electrical activity of brain cells changes the physical structure of the brain.

Within a few short years the brain grows to be 90% adult-size. By the age of two, a child's brain contains twice as many synapses and consumes twice as much energy as the brain of a normal adult.

During this time the brain will ruthlessly destroy its weakest synapses, preserving only those that have been magically transformed by experience. By the age of three, a child who is neglected or abused bears marks that, if not indelible, are exceedingly difficult to erase.

"(The brain) grows to become a dynamic ever-changing biological system which gives us the capacity to love, create, communicate or think. Our brain becomes a product of our genetic potential and our history of experience."³⁵

Many scientists believe that in the first few years of childhood there are a number of critical or sensitive periods, or "windows," when the brain demands certain types of input in order to create or stabilize certain long-lasting structures.

One such window is language. The window for acquiring syntax may close as early as five or six years of age, while the window for

adding new words may never close. The ability to learn a second language is highest between birth and the age of six then undergoes a steady and inexorable decline. Many adults still manage to learn new languages, but usually only after great struggle.

The new research offers hopes as well. Scientists have found that the brain during the first years of life is so malleable that very young children who suffer strokes or injuries that wipe out an entire (brain) hemisphere can still mature into highly functional adults.



It is becoming increasingly clear that well-designed preschool programs can help many children overcome glaring deficits in their home environment.

³⁵ Nash attributes to Perry (2000)

Healthy, nurturing and consistent experiences are needed to help the child develop its own potential. It is the experiences of early childhood that play a key role in determining the foundational organization and capabilities of the brain.³⁶

There have been many findings that point to important educational enhancements during the first three years of life. One such finding is that good, affordable child care is not a luxury or a fringe benefit for welfare mothers and working parents but essential **brain food** for the next generation. For while new synapses continue to form throughout life, and even adults continually refurbish their minds through reading and learning, never again will the brain be able to master new skills so readily or rebound from setbacks so easily than during the first three years of life.



“There is a time scale to brain development and the most important year is the first.”

The late Frank Newman, past president of the Education Commission of the States.

It can be said that the brain’s food is education. Just as the food we eat gives our immune systems the strength to fight off life-threatening infectious germs, education protects us against bad choices.

³⁶ Nash attributes to Schore, 1997, Perry, 1994

Fact Four: Early Childhood Education Works!

Maine child care programs should be among the finest in the nation because Maine children and families deserve the best that research and money can buy.

The quality of Maine's child care programs has long-term effects on the development of Maine children-

- Higher quality care provides better developmental outcomes for children from all backgrounds, particularly low income children. These children are less likely to use alcohol and other drugs, abuse or neglect their own children, suffer from poor health, fail in school, and are more likely to enter adulthood with the skills necessary to become highly productive—and responsible--members of society.



Forty Years of Research Findings for Quality Early Care and Education

In addition to brain research, studies of early care and education program methods and longitudinal studies of children's behavior and achievements have set the stage for significant investments in early childhood programs. Several renowned studies have guided the development of quality child care for more than forty years. This section will review the most prominent evidence of early care and education success.

Several long-term studies followed graduates of early learning programs through adulthood and documented significant savings in the area of remedial education, school drop outs, welfare and crime.³⁷ They include:

- ◆ *The High/Scope Perry Preschool Study*
- ◆ *Early Learning/Early Success—The Abecedarian Study*
- ◆ *The Chicago Child-Parent Center Study*
- ◆ *The Children of the Child Care Cost, Quality, and Outcomes Study.*
- ◆ *Into Adulthood: A Study of the Effects of Head Start*

Studies of children with special needs in early care and education programs have been less prevalent. One recent study completed in 2006 by a team of renowned researchers from Indiana University and the University of North Carolina at Chapel Hill is

³⁷ Material for this section was drawn directly from the High/Scope study synopsis at www.highscope.org, for the Abecedarian Study and Cost Quality Studies at www.fpg.unc.edu. Also see discussion of each report at www.NAEYC.org. Thank you to the authors of these reports for use of their material.

Early Childhood Inclusion: Cost, Quality, And Outcomes (2006).³⁸ Until this five-year study, there was limited research on the developmental and social outcomes of inclusion for children with disabilities enrolled in preschool programs. It will inform policymakers and providers in serving children with special needs in Maine's early care and education programs.

Exciting new data regarding early childhood programs and school readiness will be included in the forthcoming study: *The Early Childhood Longitudinal Studies: Birth Cohort* currently being conducted by the National Center for Education Statistics, US Department of Education.³⁹

All of these studies have significant benefits and illuminate different aspects of the lasting effects of early care and education. They reflect the challenge of providing high-quality early care and education programs that include low-income children so that these children get a fair chance to achieve their potential and contribute meaningfully to their families and to society

The High/Scope Perry Preschool Study

The High/Scope Perry Preschool Study was conducted over four decades by the late David P. Weikart, founder of the High/Scope Educational Research Foundation in Ypsilanti, Michigan.

³⁸ *Early Childhood Inclusion: Cost, Quality, and Outcomes*, electronic version can be found at: www.nectas.unc.edu.

³⁹ Abstracts of the Head Start and Early Head Start ³⁹studies can be found at www.acf.hhs.gov. *The Early Childhood Longitudinal Studies: Birth Cohort* currently being conducted by the National Center for Education Statistics, US Department of Education, can be found at www.nces.ed.gov.

The study began in 1962 by identifying 123 young African American children living in poverty and assessed to be at high risk of school failure. The researchers randomly assigned 58 of the children to a high-quality early care and education program which they received for two years; the rest received no preschool program. They studied these same groups of children every year from age 3 to age 11, and again at ages 14, 15, 19, 27 and 40. More than 35 years after they received an enriched preschool program, the Perry Preschool participants achieved much greater success in social and economic life than their counterparts.

Perry Preschool classes operated daily for children three and four years old. The teachers:

1. Were well-qualified-- had bachelor's degrees and certification in education.
2. Served no more than eight children from low-income families at a time.
3. Visited these families weekly as part of the program to discuss their child's development.

Teachers arranged the classroom and daily schedule to support children's self-initiated learning activities, provided both small-group and large-group activities, and helped children engage in key experiences in child development. Teachers studied and received regular training and support in their use of this educational model.

Rather than paying rent, receiving a subsidy, living with others, or being incarcerated, the Perry Preschool group had significantly more stable dwelling arrangements at ages 27 and 40—more of them owned their own homes and cars, and had savings, higher earnings and better education. This study confirms that these long-term effects last for a lifetime.

The major conclusion of the midlife phase of the High/Scope Perry Preschool research study is that high-quality preschool programs for young children living in poverty contribute to their intellectual

Results of the High/Scope Perry Preschool Study at 40:

- ◆ The Perry Preschool group had median annual earnings more than \$5,000 higher: \$20,800 vs. \$15,300.
- ◆ More of the Perry Preschool group were employed: 76% vs. 62%.
- ◆ More of the Perry Preschool group owned their homes: 37% vs. 28%.
- ◆ More of the Perry Preschool group graduated from regular high school particularly females: 65% vs. 45%. 82% of the females graduated from high school, 32% did not. Fewer females had to repeat a grade.
- ◆ The Perry Preschool group outperformed the non-program group on school achievement tests between ages 9 and 14, and on literacy tests at ages 19 and 27.

and social development in childhood and their school success and economic performance. It indicates that the return to the public on its initial investment in such programs is not only substantial but larger than previously estimated.

The High/Scope Perry Preschool study symbolizes what government programs can achieve. The most basic implication of this study is that all young children living in low-income families should have access to preschool programs that have features reasonably similar to those of the High/Scope Perry Preschool program. It demonstrates what can be done; the challenge is to do it.

Early Learning, Later Success: The Abecedarian Study

The Frank Porter Graham Child Development Center in Chapel Hill, North Carolina studied 111 children enrolled in their high-quality early childhood program. Fifty-seven (57) children were continuously enrolled from infancy through age 5 years in their experimental early education program. The other 54 children constituted the control group and did not receive services. Researchers followed these children until age 21.

The Abecedarian Study emphasizes the importance of providing a learning environment for children from the beginning of life. Their findings demonstrate long-lasting benefits for children, especially low income children. They go beyond demonstrating school readiness and success to identifying positive educational and social outcomes during young adulthood. The Program's Key Components are:

1. Good adult-child ratios; infants per adult 3 to 1; preschool per adult 6 to 1.
2. Ongoing professional development and salaries for staff based on the public school pay scale.
3. An individualized curriculum designed to enhance children's abilities through learning games.
4. Teachers with college degrees.

Major Findings of the Young Adult Follow-Up Study

- At age 21 those who received early childhood care and education between infancy and 5 years old were more likely to:
 - A. Score higher on IQ, reading, and math tests.
 - B. Be enrolled in or graduated from a four year college.
 - C. Delay parenthood.
 - D. Be gainfully employed.
- Young adults who received early education had significantly higher mental test scores from toddler age through age 21 than did children without the program.
- Individuals in the Abecedarian program had enhanced language skills and consistently higher reading achievement scores.
- About 35% of the young adults in the Abecedarian group had either graduated from or were at the time of the assessment attending a four-year college or university. In contrast, only about 14% in the non-program group had done so.
- Abecedarian program children showed higher scores in reading achievement and math.
- Those in the program were significantly more likely still to be in school at age 21--40% of the Abecedarian program group compared with 20% of the non-program group.
- Young adults in the Abecedarian program were, on average, two years older (19 years) when their first child was born compared with those in non-program group (17 years).
- Employment rates were higher (65%) for the Abecedarian group than the non-program group (50%)

The Children of the Cost, Quality, and Outcomes Study Go To School

Information about the long range effect of child care quality on children's school performance and skill development was released in June 1999 by researchers involved in the longitudinal Cost, Quality, and Outcomes Study which began in 1993. The 1995 report on the study documented the findings from the first phase of the research about the cost and quality of child care in America, identifying most programs as mediocre.

The 1999 report documents the findings from the second phase of the study that tracked children in these programs over a four year period when they were in preschool, kindergarten, first, and second grade.

New findings link high-quality child care to children's achievement of higher cognitive and social skills. The findings showed that the quality of children's experiences in typical child care centers affects their development while they are in child care and their readiness for kindergarten and later school success.

For most of the analyses, the study measured two aspects of child care quality: classroom practices and teacher-child relationships.



Longitudinal Findings: The Children over Time

The first set of findings looked at the relationship between child care quality and children's development from the preschool years through second grade after taking into account differences in background. The longitudinal findings provide evidence for the effects of child care quality on children's patterns of growth and development from the preschool years through the early elementary years. Children who experienced better quality child care were more advanced in their development continuing into the school years. Children whose family backgrounds made them at-risk for school failure gained the most from positive child care experiences and were more negatively affected by poor program practices and environments.

Finding One:

Children who attended child care with higher quality classroom practices had better language and math skills from the preschool years into elementary school.

Finding Two:

Children with closer teacher-child relationships in child care had better classroom social and thinking skills, language ability, and math skills from the preschool years into elementary school.

Finding Three:

Better child care quality was more strongly related to better math skills and fewer problem behaviors from the preschool years through second grade for children whose mothers have less education.

The second grade findings provide evidence for the long-term effects of child care experiences on children's abilities four years later, after considering the effects of subsequent educational experiences between child care and second grade.

Finding Four:

Children who attended higher quality child care had better cognitive and social skills in the second grade, even after taking into account kindergarten and second grade classroom experiences.

Finding Five:

Children who experienced more positive classroom climates in child care had better relationships with peers in second grade.

Into Adulthood: A Study of the Effects of Head Start

"The findings of this large-scale Head Start study point to effects on school success similar to those found in the more intensive High/Scope Perry Preschool Study." Said study coauthor Lawrence Schweinhart.

Earlier studies of the federal Head Start preschool program for low-income children and families, which began in 1965, found

short-lived effects on children's test scores, prompting the government to make program improvements.

Into Adulthood: A Study of the Effects of Head Start, presents encouraging findings from a 17-year follow-up study of 622 young adults 22 years old in Colorado and Florida, who were born in poverty and did or did not attend Head Start as young children. The researchers interviewed 77% of the original sample of children.⁴⁰



⁴⁰Oden, S., Schweinhart, L., and Weikart D with Sue Marcus and Yu Xie. *Into Adulthood: A Study Of The Effects Of Head Start*.

The study found evidence of important effects on school success and crime, especially for females at one study site after adjusting for background differences:

- Only about one-fourth as many Head Start female participants (19%) as non participants (5%) failed to obtain a high school or GED diploma.
- Only one third as many (5% versus 15%) were arrested for crimes.

The study also examined the effects of a Head Start program that used a proven curriculum, the High/Scope educational approach.

According to the report, teachers set up the classroom and the daily routine to encourage children to initiate their own learning activities. Children who attended Head Start classes that used this approach rather than the standard Head Start Curriculum of the time had a significantly higher grade point average throughout their schooling and experienced fewer than half as many criminal convictions by age 22. A recent national survey found that 37% percent of Head Start programs use the High/Scope approach.

Study coauthor and High/Scope president David Weikart added, "This study strengthens the evidence that early childhood programs need a high-quality, educational approach to have positive effects on children's lives."

Yale University's Edward Zigler and Sally Styfco noted, "The findings confirm that we are on the right track in deploying comprehensive interventions and advocating for high-quality services."

Policy Implications of the Research

-  **Child care quality is important for all children. The importance of high quality, educational child care from early infancy is clear.** The Abecedarian study provides scientific evidence that early childhood education significantly improves the scholastic success and educational attainments of poor children even into early adulthood. The Cost/Quality Study showed that the quality of typical child care centers had long-term effects on children's development.
-  **Every child deserves a good start in an environment that is safe, healthy, emotionally supportive, and cognitively stimulating.** The Abecedarian early education program began in early infancy, emphasizing the importance of providing a learning environment for children from the very beginning of life.
-  **Child care quality may be especially important for children at risk. Children living in poverty will need early child care. The educational stimulus value of these early years must not be wasted.** For children with less highly educated mothers in the Cost/Quality Study, better quality child care was even more strongly related to better math skills and fewer problem behaviors through second grade. We must not lose this opportunity to provide them the early learning experiences that will increase their chances for later success.



 **Quality care requires sufficient well-trained staff** to ensure that every child receives the kind of appropriate, individualized attention provided by the Abecedarian model.

 **The social-emotional climates of child care classrooms as well as individual children's relationships with their teachers are important predictors of children's success.** The Cost/Quality Study found that actual classroom practices, including materials, activities, and interactions, contributed most strongly to children's language and math development, but early relationships with caregivers provided the strongest influence on thinking/attention skills, social competence with peers, and problem behaviors. These findings suggest that child care classrooms provide an environment for children to establish patterns of relationships that persist over time and over the transition into elementary school.

 **The effects of child care quality are long term.** Child care quality in the Cost/Quality Study continued to exhibit an influence on children's outcomes at least through kindergarten (for language ability and sociability) and, in some cases (for math ability, thinking/attention skills, and problem behaviors), through second grade four years later. These long-term findings cover a substantial portion of time in these children's lives— transitions to and experiences in kindergarten, first grade, and second grade.

Both sets of study findings reveal that children who have more positive child care experiences during the preschool years have better outcomes through the elementary school years, after controlling for differences in background characteristics. More positive experiences mean better social and cognitive outcomes for children.

Early Childhood Inclusion: Cost, Quality, and Outcomes

Early Childhood Inclusion: Cost, Quality, And Outcomes (2006) by Samuel Odom at Indiana University and Virginia Buysse at the University of North Carolina at Chapel Hill, provides the most recent look at children with special needs in early care and education programs.

According to the study, more than 50% of the pre-kindergarten children with disabilities who receive publicly funded special education services are placed in an inclusive setting

But little is known about the relationship between the cost and quality of these programs and the social outcomes for children with disabilities attending the programs. Buysse in North Carolina and Odom in Indiana studied 142 young children with disabilities in inclusive community-based child care, Head Start, and public school pre-K programs for a five year period. The ages of children ranged for 48 to 54 months with disabilities ranked from mild (70 children), moderate (39 children), and severe (34 children).

The community-based programs had an early childhood educator as lead teacher and received special education services from public schools. A Head Start teacher was lead teacher in those programs, and in some cases the role was shared by a teacher from the public schools. Schools also offered special education services to Head Start programs. In the preschool programs operated by public schools, either an early childhood education or special education teacher was lead teacher.

Researchers also looked at children in programs using blended Head Start, Title 1, and public school resources identified as

“blended” programs. In this model a certified teacher employed by the public schools was a lead teacher.

Conclusions from the Study

-  The cost of the programs varied across the types of programs and was primarily related to salaries of special education teachers. The blended programs tended to have higher costs but also somewhat higher quality services. The more severe the disability, the more costs tended to rise.
-  The quality of the programs was considered “medium” quality with scores between 4 and 5 on the ECERS score. (See Recommendation II: Quality)
-  Children with disabilities appeared to be actively participating in classroom activities between 55% and 60% of the time, similar to results found in earlier research.
-  The children with disabilities were accepted by their peers and they had special friendships with other children, friendships that increased over the course of the year.
-  The developmental quotients for children with disabilities increased across time, and child progress occurred across all domains.
-  Individualization as a measure of the quality of inclusion appeared to have a positive effect on child outcomes in the cognitive, communication, and motor domains.

Forthcoming Research on Early Childhood Education Programs: Early Childhood Longitudinal Study, Birth Cohort

The National Center for Education Statistics (NCES) in collaboration with several health, education, and human services agencies is conducting a unique study: *The Early Childhood Longitudinal Study, Birth Cohort (ECLS-B)*.

The ECLS-B researches the same children from:

- (1) Birth to six not yet in kindergarten, and
- (2) Kindergarten to fifth grade.

The ECLS-B selected a national sample of children. Information about the children was collected when the children were approximately 9-months (2001), 2-years (2003), and in preschool (one year away from kindergarten, fall 2005). In the fall of 2006, data was collected from all participating sample children, 75% of whom are expected to be age-eligible for kindergarten. In the fall of 2007, data will be collected from the remaining participating sample children who are newly eligible for kindergarten.

Together, these age cohort studies provide data to more fully understand children's health, early learning, development, and education experiences. They will shed light on how children's early experiences influence their early school experiences and academic achievement.

Information is collected from children, their families, their teachers, and their schools all across the United States. Unique to this study is the inclusion of fathers who are asked directly about their children and their involvement with them.

At all stages of the study parents are asked about themselves, their families, and their children. Fathers are asked about themselves and the role they play in their children's lives; children are observed and participate in assessment activities.

IN addition, when the children are 2 years old and in preschool (4 years old), early care and education providers are asked to provide information about their own experience and training and the setting's learning environment. When the ECLS-B children are in kindergarten, teachers are also asked to provide information about children's early learning and the school and classroom environments.

The ECLS-B is exciting information. In the absence of current, representative, comprehensive, and longitudinal data, the study can be used to effectively inform policies regarding children, their families, and their health, early care and education.



Fact Five: Quality child care programs bring industry to Maine and keep Maine families working.

It makes economic sense to invest in high quality early care and education for Maine's youngest children.

There are immediate returns to Maine's investment:

- High quality early care and education promotes economic development in Maine and attracts new industry looking for a stable, reliable workforce and safer communities.
- High quality child care supports economically viable families and boosts their earning power. Working parents in Maine who rely on licensed child care earn as much as \$860 million annually.
- Child care has become the fourth largest industry in Maine. It generates jobs and purchases local goods and services. It is nearly a \$200 million dollar industry employing about 9,000 Maine residents.

And there are significant long term results from quality early care and education programs:

- High quality early care and education creates documented savings from reduced social services, alcohol and drug treatment, health care, and remedial education. Less crime means huge savings in the criminal justice system, property loss, and victim trauma.
- High quality child care ensures a strong economy for the future. Children get a jumpstart on education and learn to compete in a technologically advanced culture--raising the Gross Domestic Product (GDP) and enhancing the solvency of Social Security.

It's a *WIN-WIN* for all of Maine.

High quality early care and education is important to Maine business and to every Maine citizen. It makes economic sense to invest in early childhood programs.



Maine Can Achieve High Economic Returns on Quality Early Care and Education

The economics of Early Care and Education is complex. It involves myriad benefits for the child, parents and family members, employers, current and future workers, and society as a whole. It impacts government spending for education, health, and social services. It engages society at very basic levels, from assuring children are properly nurtured and cared for, to knowing that the future is secure and communities safer.

Despite the industry's economic influence on the Maine economy, it falls short in supply, is mediocre in quality overall, and is difficult for Maine working parents to afford.

This section will reference what we know about children's early brain development; the impact of high quality early care and education on children's academic, social, and emotional development; and the economic and social consequences of early childhood education as crime prevention.

The remainder of this section examines the research and information available on the financial impact of early care and education programs and the returns on Maine's investment in them.

The following table looks at the impact of high quality early care and education for Maine's youngest children, from the child, family, and societal vantage points.

“Society pays in many ways for failing to take full advantage of the learning potential of all its children from lost economic productivity and tax revenues to higher crime rates to diminished participation in the civic and cultural life of the nation...Over a decade ago, the Committee for Economic Development (CED) urged the nation to view education as an investment, not an expense, and to develop a comprehensive and coordinated strategy of human investment.”

Committee for Economic Development, 2002

The Committee for Economic Development is an independent, nonpartisan organization of business and education leaders dedicated to public policy. In the last 62 years the CED has addressed national priorities from the Marshall Plan in 1940s to campaign finance reform in 2000.

High Quality Early Care and Education in Maine is a Win-Win Situation for Children, Families, the Retiring Population, Government, and all Maine Taxpayers.

MAINE CHILDREN WIN	MAINE FAMILIES WIN	MAINE'S ECONOMY AND FUTURE WINS
<ul style="list-style-type: none"> ▶ Sets the stage for lifelong learning. ▶ Stimulates healthy brain growth. ▶ Builds social competencies—better relationships with peers. ▶ Provides stable, stimulating environment for “children at risk.” ▶ Offers early intervention for children with special needs. 	<ul style="list-style-type: none"> ▶ Supports economically viable families who can work to support themselves. ▶ Refocuses families on their jobs and takes the worry out of child care—Are my kids safe? Are they getting what they need? ▶ Means fewer personal days or leaving early/arriving late due to unreliable child care. 	<ul style="list-style-type: none"> ▶ Maine employees have less absenteeism and turnover due to worry and stress from inadequate child care services. ▶ Steady earnings boost local economy and contribute to Maine’s economic well being.
<ul style="list-style-type: none"> ▶ Promotes school success. ▶ Children continue their education – more likely to graduate from high school, stay in school until age 21, graduate from college. 	<ul style="list-style-type: none"> ▶ Better wages, more secure employment, and fewer job changes means more spending power for the family and more savings power for the future—college and retirement. 	<ul style="list-style-type: none"> ▶ Promotes economic development and attracts new industry to Maine looking for a stable, reliable workforce and safer communities.
<ul style="list-style-type: none"> ▶ Increases earning power—higher income, more likely to hold down job, own home and car, and have a savings account. 	<ul style="list-style-type: none"> ▶ Maine working parents contribute more than \$860 million to the economy. 	<ul style="list-style-type: none"> ▶ Future earnings from child will lead to more stable economy, and secure retirement financing for aging population ▶ Productive workers contribute their fair share of tax contributions
<ul style="list-style-type: none"> ▶ Promotes individual adult success—more likely to delay parenthood, less likely to use drugs and alcohol, less likely to commit crime and domestic violence, less likely to suffer from poor health. ▶ Prepares children to compete effectively in global labor market and new technologies. 		<ul style="list-style-type: none"> ▶ Less crime—safer communities—huge economic savings in justice system, property loss, and victim trauma. ▶ Economic savings from reduced social services, welfare, alcohol and drug treatment, health care, and remedial education.
		<ul style="list-style-type: none"> ▶ Child care industry is the fourth largest industry in Maine employing 9,000 Maine residents, contributing over \$200 million to the economy in addition to more than \$860 million from working parents.

Quality Early Care and Education is an Economic Development Tool—To Improve Current Productivity and To Build a Future Competitive Workforce.

Improving Maine's Current Productivity

Increasing the supply of affordable quality child care helps Maine become a more attractive location for both new industry and new residents alike. It improves productivity of the current workforce of parents with young children while improving their own earning power.

A Harris Poll of working parents conducted between January 14 and 18, 1998 remains a definitive statement on the impact of child care:⁴¹

- Half (51%) of the parents say it has been extremely or very difficult to find affordable care, and almost as many (44%) say it was extremely or very difficult to find high quality care.
- Half of these people say the lack of acceptable child care reduced their, or their spouses, or partner's ability to do their job as well as they wanted to do it.
- 43% say the lack of acceptable care prevented them from taking a job they wanted.
- Fully 89% of all adults believe that it is difficult for most American families to find affordable high quality child care and 57% believe it is extremely or very difficult.
- However, most people (60%) believe that it is primarily the family's responsibility to find child care, many fewer

⁴¹The Harris Poll #5, January 28, 1998. Harris Poll on Child Care. <http://www.harrisinteractive.com/harrispoll>.

believe it is primarily the government's (15%) or the employer's (23%) responsibility.

Stable, reliable child care lowers absenteeism and turnover rates. A 2006 Harris Poll conducted from June 28 through July 17, 2006 by Harris Interactive, a leading global market research and consulting firm, showed unscheduled absences from work climbed to its highest since 1999.⁴²

- They estimate these non-health related absences cost some large employers an estimated \$850,000 per year in direct payroll costs, and even more when lost productivity, morale and temporary labor costs are considered.
- Almost two out of three employees who fail to show up for work aren't physically ill, according to the CCH 2006 survey.
- The survey found that personal illness accounts for only 35% of unscheduled absences, while 65% are due to other reasons, including family issues (24%), personal needs (18%), and stress (12%).
- It is estimated that worker absenteeism nationwide due directly to child care problems cost U.S. businesses \$3 billion per year.⁴³

⁴²CCH *Unscheduled Absence Survey* conducted for CCH, a leading provider of human resources and employment law information and services and a part of Wolters Kluwer Law and Business, by Harris Interactive. <http://hr.cch.com/press/releases/absenteeism>.

⁴³Harris Interactive. *CCH Unscheduled Absence Survey, 2002*, cited in the *Economic Impact of the Child Care Industry in Solano County, Ca., The Solano County Children and Families Commission*.

With Child Care Maine Parents Earn More.

- Working parents in Maine who rely on licensed child care earn \$854 million annually.⁴⁴
- The Abecedarian Project study found that mothers whose children participated in the high quality program achieved higher educational and employment status than mothers whose children were not in the program.⁴⁵

Maine Can't Afford a Future Without a Skilled, Productive Workforce Prepared to Compete in the New Economy.

Global economic forces, including trade agreements, are impacting Maine's employment. Work that can be done at lower cost to employers has shifted to countries like Mexico and China. The changing job composition is creating a shift to a more service-oriented economy. Given a highly dynamic global labor market, Maine must diversify its employment base in order to compete for jobs.⁴⁶

According to the Maine Economic Growth Council, Maine lost 30,000 manufacturing jobs from 1990 to 2004. During that same period professional and service-oriented jobs in health care and social assistance increased by 37,000; leisure and hospitality jobs grew; and government jobs remained stable.⁴⁷ Over the next 20

⁴⁴ Hildebrand, Alex in partnership with ACCESS/CITE. *The Economic Impact of Child Care Industry in Maine*. Portland, ME: Peoples Regional Opportunity Program, June 2003.

⁴⁵ <http://www.fpg.unc.edu>.

⁴⁶ MEASURES OF GROWTH IN FOCUS, 2006. *Performance Measures and Benchmarks to Achieve a Vibrant and Sustainable Economy for Maine*. Twelfth Report of The Maine Economic Growth Council and The Maine Development Foundation.

⁴⁷ *Measures of Growth*

years, approximately 108,631 new non-farm jobs will be added to Maine's economy.⁴⁸



Research has shown that high quality early care and education programs have results that prepare children to succeed throughout their life. More children who participate in these programs graduate from school, go to college, and have greater math and language skills which prepare them for careers in the new technologies and international competition.

“Maine...must encourage its citizens to develop their knowledge and creativity in order to add greater value to what we produce. By making this effort, Maine can attract jobs to replace those lost in its traditional manufacturing sector that, as a result of global economic forces, continues to decline.”

Maine Economic Growth Council/Maine Development Foundation, *Measures of Growth 2006*. The Maine Economic Growth Council was established by statute in 1993 and charged with developing a long-range economic plan for the state.

⁴⁸ *Measures of Growth*

Quality Early Care and Education Can Increase the Number of Maine Youth Who Complete High School and Have Higher Education Degrees.⁴⁹

Higher education has become an increasingly critical factor in Maine's economic development, given today's "knowledge economy." Each of Maine's degree attainment levels needs to grow in order for the state to attract business investment and create better jobs. A more educated workforce is central to Maine's competitiveness in an era of rapid knowledge advancement around the globe.⁵⁰

- ▶ In the 2005 American Community Survey, Maine reports only 25.6% of adults 25 years and over have a bachelors degree or higher (17% bachelor's degree, 8.6% graduate or professional degree.)⁵¹
- ▶ Compared to the rest of New England in 2004, 13.8 percent of New Englanders had graduate or professional degrees, while only 8.2% of Mainers did. New England's bachelor's degree rate was 20.4 percent last year, whereas Maine's was 17.9.⁵²

Maine consistently ranks among the top ten states in the country in high school completion and low drop-out rates. However, the most recent Maine Marks 2006 Indicators show poor academic achievement and create a picture of Maine's current youth population that does not prepare them for future economic competition.⁵³

⁴⁹ *Maine Marks: A set of social indicators that reflect the well being of Maine children, families, and communities. Maine Children's Cabinet. [Http://www.mainemarks.org](http://www.mainemarks.org). The education status and degree attainment statistics in this section comes from this source, unless otherwise noted.*

⁵⁰ *Measures of Growth*

⁵¹ *2005 American Community Survey. Selected Population Profile in the United States, Maine's Educational Attainment.*

⁵² *Measures of Growth*

⁵³ *Measures of Growth*

- ▶ Only in "reading" are nearly half of all Maine 11th grade students (44%) meeting or exceeding the State's *Learning Results* standards in 2004/2005, the primary way in which educational performance is tracked in Maine. Science and technology was the lowest (only 10%), followed by math skills (only 22% met or exceeded standards.)⁵⁴

Mainers can earn much more with college degrees.

- ▶ In Maine, an individual with a bachelor's degree can expect to earn a median income 43% greater than a person with only a high school diploma. Nationally, that percentile is 60% among the nation's white population 25 and over.⁵⁵
- ▶ The wages of a Maine worker with a graduate degree exceeds the person with only a high school degree by 76%, or 160% nationally.⁵⁶

⁵⁴ *Measures of Growth*

⁵⁵ *US Census. Maine Earnings by Occupation and Education, 2000 and Annual Demographic Survey, March 2006 Supplement.*

⁵⁶ *US Census. Maine Earnings by Occupation and Education, 2000 and Annual Demographic Survey, March 2006 Supplement.*

Completion of a post-secondary education program is vital for Maine's long-term economic growth and for fulfilling the aspirations of Maine's young people.

- ▶ Compared with other states, a very large percentage (76%) of Maine freshmen at four-year colleges and universities return for their sophomore year but this figure has been declining over the past ten years.
- ▶ Using 2004 data, 57% first-time, full-time college students are expected to complete a bachelor's degree within six years of enrolling in college; 43% will not.

The level of educational attainment of Maine citizens is critically important to the State's quality of life and economic well-being. The long term economic competitiveness of Maine is directly linked to the skill and education level of its workforce.

"In the long run, significant improvements in the skill levels of American workers, especially workers not attending college, are unlikely without substantial improvements in the arrangements that foster early learning. We cannot afford to postpone investing in children until they become adults, nor can we wait until they reach school age—a time when it may be too late to intervene."

Nobel Prize-winning Economist James Heckman, University of Chicago



Immediate Economic Contributions--The Economic Impact of the Child Care Industry

"Child care is an income-generating, job-creating industry that is a critical component of Maine's economic vitality," according to the 2003 report, *The Economic Impact of the Child Care Industry in Maine*.⁵⁷ Researchers looked at 1,845 licensed child care establishments that care for 43,000 children ages 6 weeks – 13, including 1,286 family child care homes and 559 centers.⁵⁸

The child care industry represents a total annual contribution to the economy of \$253 million and nearly 12,000 jobs. Using 2002 data, the report concludes that:

- ▶ Licensed child care facilities generate \$180.6 million annual in gross receipts--\$114.7 million from child care centers and \$56.7 million from family child care home revenues, added to \$9.2 million in federal funding.⁵⁹
- ▶ The child care industry employs 8,824 Maine residents. This includes child care teaching staff (8,282) as well as staff support for meals, cleaning and maintenance, and administration (542).

⁵⁷ Hildebrand, Alex in partnership with ACCESS/CITE. *The Economic Impact of Child Care Industry in Maine*. Portland, ME: Peoples Regional Opportunity Program, June 2003.

⁵⁸ *Center-based care includes Head Start and Early Head Start, nonprofit and school-affiliated programs, and proprietary centers. The number of children includes infant, toddler, preschool, kindergarten, and school-aged care in full or part- time child care arrangements.*

⁵⁹ *Note. Gross receipts represent the licensed child care industry at a specific point in time and do not include unlicensed care: nannies, relatives, babysitters, etc*

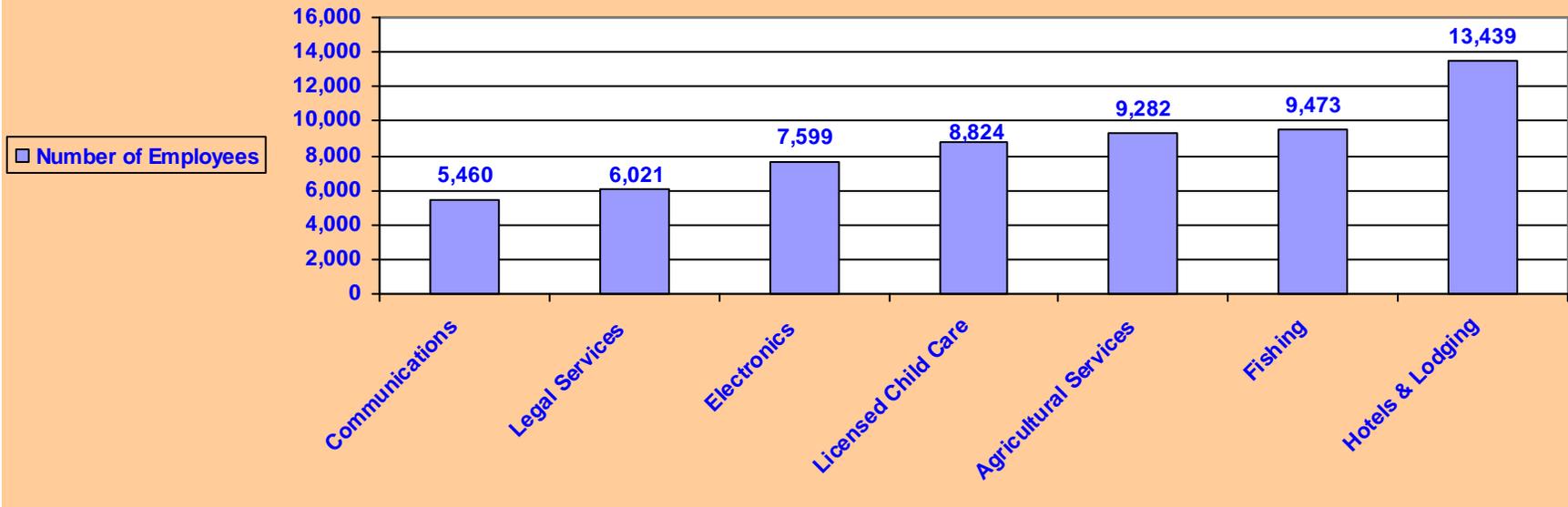
- ▶ Through goods and services purchased to support child care and through the purchasing power of employee wages, licensed child care supports an additional \$72.2 million annually in gross receipts and 3,134 jobs in supporting industries.



"Early childhood programs are services that have been absent from current economic theories, however, they are now being used in the design of pioneering economic modeling."

Dana E. Friedman, Ed.D.

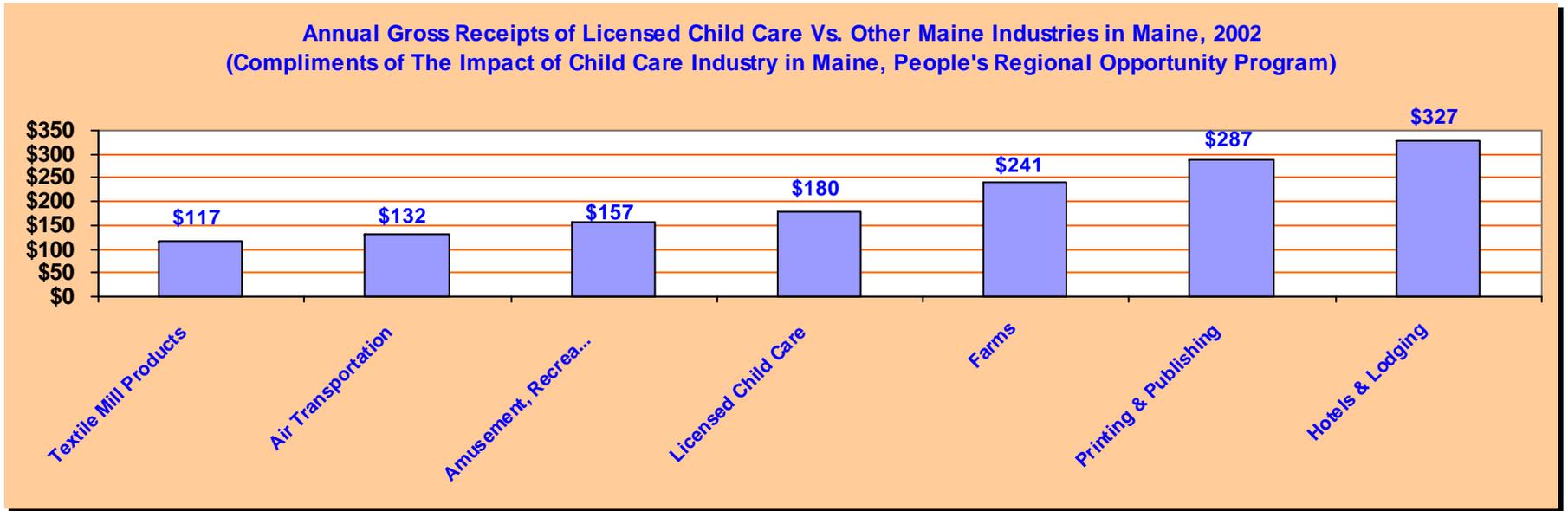
Licensed Child Care Employment vs. Select Other Major Industry Groupings in Maine, 2002
 (Compliments of The Economic Impact of Child Care Industry in Maine,
 People's Regional Opportunity Program)



"Like transportation, education, public works, and affordable housing, child care is a necessary and vital part of the economic infrastructure. Without a well-maintained highway system, Maine's manufacturing sector would be unable to neither effectively transport their raw materials nor bring in a skilled workforce from surrounding areas. Without a healthy child care industry, businesses face substantial obstacles in attracting and retaining workers."⁶⁰

⁶⁰Hildebrand

Child Care is the Fourth Largest Industry in Maine



Long Term Societal Effects as a Result of Quality Early Care and Education Saves Government Spending

The longitudinal studies of the effects of good preschool programs on young at-risk children are discussed in Section Four: Early Care and Education Works! These studies followed the children who attended early care and education programs into adulthood. Over their lifetimes, they showed:

- improved school achievement and grade retention,
- reduced need for special education,
- increased earnings,
- improved employment rates,
- home ownership and owning second cars,
- reduced welfare assistance, and
- reduced crime.

As a result of these improved behaviors, researchers documented significant savings in government spending for remedial education, health care, social service programs, and crime. The savings documented from crime prevention include taxpayer support for the criminal justice system as well as the personal and economic toll of crime, itself. (See *Fact Six: Crime Prevention*.)

But how does early childhood education make a difference later in life?

The High/Scope curriculum taught in the High/Scope Perry Preschool program in the sixties, in particular, taught children to make plans and anticipate consequences.⁶¹ The effects of quality

⁶¹*Benefits, Costs, and Explanation of the High/Scope Perry Preschool Program* Lawrence J. Schweinhart High/Scope Educational Research Foundation Paper presented at the Meeting of the Society for Research in Child Development Tampa, Florida April 26, 2003 Abstract.

early care and education on individuals are based on improved productivity and enhanced socialization skills. As discussed above, participants in early learning programs are more likely to develop marketable skills and pursue healthy, socially positive behaviors.⁶²

Lawrence J. Schweinhart, president of the High/Scope Foundation,⁶³ further suggests that the preschool program affected both intellectual performance and school motivation from the beginning, not just at school entry. Taken a step further, he believes, the program did not affect participant's criminal activities through a complex chain of variables throughout their lives, but rather it affected their antisocial behavior from the beginning.⁶⁴

The long term benefits of the program, according to Schweinhart, occur because the early care and education programs are high-quality containing elements important to the success of young children, such as:

- They provide children with significant learning opportunities
- They involved parents as full partners with teachers supporting the children's development.
- They provide teachers with systematic in-service curriculum training and supportive curriculum supervision.

These studies combined with the brain research show the economic impact of early learning opportunities for young children, especially children growing up in poverty. The consequences of child hood poverty are profoundly negative and have an impact on Maine's collective economic health and well-being. If we can prevent crime, alcohol and drug abuse, child abuse, poor health, school failure, and poor basic life skills—all consequences of poverty—through quality early care and education experiences, than we can improve Maine's way of life.

⁶² Dana E. Fredman, Ed.D.

⁶³ Schweinhart. *Benefits, Costs, and Explanation*.

⁶⁴ Schweinhart. *Benefits, Costs, and Explanation*

Cost Benefit Analyses

The cost-benefit analyses conducted on the Perry Preschool, Abecedarian Project, Chicago Child-Parent Centers and the Elmira Prenatal/Early Infancy Project range from \$3.00 to almost \$9.00 for every dollar invested. Adjusted for inflation, the internal rates of return on these programs range from about 7% to above 16% annually.⁶⁵

A benefit-cost analysis was conducted of the Perry Preschool Program when the participants reached age 27 and again at age 40 by estimating the monetary value of the program and its effects in constant dollars discounted annually at 3%. In 2001 dollars per study participant, the average cost of the program, used in the cost-benefit analysis, was \$14,716 per participant.⁶⁶

The economic benefits to the public, as taxpayers and as potential crime victims, were \$105,324 per participant, a cost-benefit ratio of 7.16 to 1.⁶⁷

- ➔ \$10,537 brought in by increased taxes paid by preschool-program participants because they had higher earnings
- ➔ \$7,488 saved in schooling, due primarily to reduced need for special education services, and despite increased college costs for preschool-program participants
- ➔ \$3,475 in reduced welfare costs \$68,584 saved by the potential victims of crimes never committed, based on the typical in-court and out-of-court settlements for such crimes
- ➔ \$15,240 in reduced justice system costs

Investing in our poor young children is likely to have an enormous positive impact on our economy by:

- ✓ **Raising the Gross Domestic Product (GDP)**
- ✓ **Enhancing the solvency of Social Security**
- ✓ **Improving the Skills of our workforce**
- ✓ **Strengthening the global competitiveness of the U.S. economy**
- ✓ **Reducing crime rates and the heavy costs of criminality**
- ✓ **Reducing Poverty**

Robert Lynch

The 40-year summary report of the Perry Preschool Study showed that the long-term benefits continued into adulthood, changing the total benefit cost-ratio to \$17.00 for \$1.00 invested. Benefits to the general public, alone, are almost \$13.00 to every \$1.00 spent.⁶⁸

Not all families need interventions. Extending the program to all of the 4 million children under 5 who are currently living under the poverty line would yield an estimated private net benefit of \$4.6 billion for boys and \$97.8 billion for girls. For the general public, the estimated net benefits are \$254.4 billion for boys and \$154.8 billion, for girls.⁶⁹

Economist, Robert Lynch, estimates that within 25 years of a nationwide preschool program for children living in poverty would exceed costs by \$31 billion in 2004 dollars. By 2050, the net budget savings would reach \$61 billion in 2004 dollars.⁷⁰

Compared to the Cost of Public Education

Public funding of education is part of America's history, first declared by John Adams in 1779 when he said, "The fundamental duty of government is to provide for education."⁷¹

⁶⁸ Lawrence J. Schweinhart, "The High/Scope Perry Preschool Study Through Age 40: Summary, Conclusions and Frequently Asked Questions." The High/Scope Educational Research Foundation, November 2004. <http://www.highscope.org/research>.

⁶⁹ James J. Heckman and Dimitriy V. Masterov, "The Productivity Argument for Investing in Young children: Working Paper 5," Invest in Kids Working Group, Committee for Economic Development. October 2004.

⁷⁰ Economic, Fiscal, and Social Benefits of Investment in Early Childhood Development by Robert G. Lynch

⁷¹ Grunewald, Rob and Rolnick, Art. EARLY CHILDHOOD DEVELOPMENT: ECONOMIC DEVELOPMENT WITH A HIGH PUBLIC RETURN. FedGazette, March 2003. <http://minneapolisfed.org/pubs>.

Public schools as well as colleges and universities receive public support because their role in developing the future workforce is widely accepted. Yet, despite brain development research and the success of decades of proven high quality early childhood development programs, public investment in the care and education of the very youngest children is not commonly accepted.

Further, based on the cost analyses of early childhood programs, the cost of many high quality early care and education programs compares favorably to the cost paid for public education. Many of the quality programs may seem very expensive until you look at the large number of hours during which children—and their families—participate in full time, full year programs.

At \$5.00 to \$11.00 an hour, many best practices early childhood programs fall within the cost range of public education, which is estimated to be \$3.00 to nearly \$10.00 an hour.⁷²

Knowing the Returns, What are the States' Investments in Early Learning?

The study, *Early Learning Left Out*, looked at the public investments in the education and development of children in three age groups: early learning years (birth to 5), school-aged years (6-18), and college-aged years (19-23). Using state, federal, and school district spending in 12 states across the country, Voices for America's Children and the Iowa child and Family Policy Center worked with state organizations to develop a better understanding of overall public investments in young children.⁷³

⁷² University of Pittsburgh Office of Child Development. *Investing Today for Tomorrow: The Costs and Benefits of Early Childhood Care and Education*. June 2003.

⁷³ Bruner, C., Elias, V., Stein, D., Schaefer, S. *Early Learning Left Out: An Examination of Public Investments in Education and Development by Child Age*. Voices for America's Children and the Child and Family Policy Center.

“The real benefits (from early care and education) are not from making children smarter, but from nurturing children’s non-cognitive skills, giving them social, emotional, and behavioral benefits that lead to success later in life.”

Committee for Economic Development, “A New Framework for Assessing the Benefits of Early Education.” A Working Paper. NY. September 2004.

February 2004. (States: AL, AR, CO, CT, KS, MI, MO, SD, VT, WS using 2001 FY)

While Maine was not a part of the study, their findings are valuable for Maine’s policymakers to consider:

- ▶ Nearly 90% of a child’s core brain structure is formed by age three but less than 4% of public investments on education and development have occurred by that time.
- ▶ On a per child basis, public investments in education and development are more than seven times greater during the school-aged years (\$5,410 per child) than during the early learning years (\$740 per child).
- ▶ Every dollar society invests in the education and development of a school-aged child, society invests only 13.7 cents in that child during the earliest learning years—a major investment gap.
- ▶ The under-investment in young children also appears to be greatest for the very earliest and most formative years of life (the infant and toddler years-0-2).
- ▶ State investments in education and development in the earliest learning years constitute a very small percentage of overall public expenditures, in many states less than 1%.
- ▶ While the largest share of the funding for education and development during the earliest years comes from federal programs for child care and Head Start, the funding for school-age children comes from predominately state and local sources of funding.

“Yet, in today’s world,” according to the Business Roundtable, “where education and skill levels determine future earnings, the economic and social costs to individuals, communities, and the nation of not taking action on early childhood education are far too great to ignore, especially when the benefits far outweigh the costs.”⁷⁴



⁷⁴ *Early Childhood Education: A Call to Action from the Business Community, Why America Needs High-Quality Early Childhood Education. The Business Roundtable and Corporate Voices for Working Families. 2003. <http://www.cvworkingfamilies.org>.*



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