

PASMEMO

January/February 2006

Child Care and Economic Development: The Role for Planners

By Mildred Warner

Traditionally, child care has been considered the private problem of families. Unlike other advanced industrialized countries, the U.S. has *not* made a major public commitment to support early education and child care for our youngest children (birth to age five) (Kammerman 2001). As a result, working parents here face more financial and emotional stress than their Canadian and European counterparts (Gornick and Meyers 2003). Employers, economic development professionals, and planners are now realizing the costs to productivity of this failure.

Child care is now being recognized as part of the social infrastructure for economic development (Warner, Ribeiro, and Smith 2003). Just as roads and public transit help people get to work, so does child care. But public subsidies for highways and transit allow the user to pay only a small portion of the total costs. In contrast, parents shoulder the primary financial burden for child care. Public support is largely limited to children of low-income families (for example, the Head Start program or child care subsidies developed as part of the 1996 welfare reform effort). For the vast majority of working parents, there is no public support beyond the dependent care tax credit, which for most families averages only a few hundred dollars a year.

The challenge of child care extends beyond the concerns of working families. It affects land-use planning, economic development strategies, and both public and private finance. The child care sector, as an emerging market, needs the attention of both professional planners and economic development professionals to help address its market challenges and ensure it is included as part of the community planning process.

It is critically important that planners understand the complexity of child care as a market sector and engage experts in early care and education policy before attempting to craft solutions. Differences in professional language and expertise between the child care and economic fields have made this difficult. Lack of dialogue and collaboration may also reflect gender bias, because child care has traditionally been considered the private problem of women and not the public problem of economic developers. Planners are uniquely trained to cross boundaries and facilitate communication and collaboration across sectors. That role is needed now as the child care community reaches out to business and economic development leaders. Planners can and should play a key facilitation role to ensure these new collaborations represent a sharing of power and expertise.

Integrating Child care and Economic Development

Cornell University's Linking Economic Development and Child Care Project has been a leader in providing research, analysis, and planning support for this work. This *PAS Memo* provides a summary of these issues, giving special attention to a new report, *Economic Development Strategies to Promote Quality Child Care*, published in 2004. It also provides some background on the current state of underinvestment in the early care and education sector, and explores the growing economic interest in the long-term impacts of the sector on human capital development.

This interest has created a momentum that planners can capture to effect real policy and programmatic change. However, to be effective, this interest must be expanded from a narrow focus on preschool (Heckman and Masterov 2004, Lynch 2004, Committee for Economic Development 2002) to a more comprehensive perspective that places child care in the context of families and communities. Planners can play a critical role in ensuring policies reflect the reality of the current structure of the child care sector and the context faced by working families.

This *PAS Memo* also reviews current debates in economic development theory and practice and shows how they can be related to child care. It outlines the key principles of economic development and demonstrates how they can be applied to the child care sector. Specific examples are drawn from the 2004 Cornell University report.

From Private Problem to High Public Return

Mona Harrington, in her book *Care and Equality: Inventing a New Family Politics* (1999), describes how Americans have defined child care as the private problem of families. The privacy of family, and belief in the supremacy of market solutions, has led policy makers to avoid addressing the challenges of the inadequate social infrastructure of child care in America. Rather than recognize the structural problem of an economy that requires both parents to work outside the home and fails to provide an adequate system of child care, we instead tend to define these problems as moral failures of parents. For example:

Recall the mother in Brooklyn, New York, who worked the night shift at McDonalds and, when her child care provider failed to show up, had to choose between leaving her children home alone or missing work and losing her job. She went to work; the provider never showed up; the apartment caught fire; and the children were killed. The mother is now in jail for her moral failure to care adequately for her children. (Bernstein 2003).

Michael Moore, in his film *Bowling for Columbine*, describes a similar case in Flint, Michigan, where poor working mothers ride a bus for more than an hour to work in shopping malls in higher-income suburbs, leaving their children to get to school on their own. In the case he describes, a six-year-old boy took a gun to school and killed a classmate.

These are not private problems of individual parents; they represent three fundamental issues:

- The structural challenges of an economy that fails to produce jobs that pay a family wage.
- The lack of workplace policies that support the dual role of parents as workers.
- The failure of planners and policymakers to build an adequate infrastructure for child care in America.

In recent years, recognition of the long-term economic returns of investment in early care and education has caught the attention of economists. Building on the human capital arguments first advanced by Nobel laureate Theodore Schultz (1961), James Heckman, another Noble laureate, has argued that investment in early education promises even greater return than investments later in life, because "learning begets learning" (Heckman and Masterov 2004). Art Rolnick of the Federal Reserve Bank of Minneapolis has argued that early education is an economic development investment with "high public returns," higher than most other economic development investments. He insists it is time for economic developers to look beyond "beggar thy neighbor" tax abatement strategies, or short-term retail-focused investments such as sports stadiums, and instead invest in long-term human capital investment, starting with preschool (Rolnick and Grunewald 2003). This research has helped to fuel a Pew Charitable Trusts -funded campaign focused on expanding preschool programs for three- and four-year-olds, but frequently this work results only in proposals for part-day programs limited to poor children.

The Cornell University team believes a broader approach is needed, one that includes communities, families, and children of all ages and income levels. We use the trillium flower to illustrate the threefold importance of child care (see Figure 1):

- The long-term human development impact on children (as illustrated by Rolnick and Grunewald 2003, Lynch 2004 and Heckman and Masterov 2004);
- The critical support role that child care plays in enabling parents to work (as noted by Gornick and Meyers 2003 and Shellenback 2004); and
- The importance of the child care sector itself in the regional economy, as small businesses, employers, and sources of regional economic integration (Ribeiro and Warner 2004; Liu, Ribeiro, and Warner 2004).

Figure 1: The Threefold Economic Importance of Childcare



Source: Ribeiro, R. and M. Warner 2004.

The Need for a More Comprehensive Perspective

Child development experts have long known that investments in early education have high returns, and they have crafted interventions to recognize the child in the context of family (Schweinhart et al. 2005, Shore 1997). Full-day, full-year programs have been designed that support the child and her parents. Benefits in terms of health, reduced violence, and improved parental career and wage trajectories have been found (Masse and Barnett 2002). While Heckman and Masterov (2004) recognize poor parenting as part of the problem, they do *not* recommend financial support or more family-friendly employment options for parents as part of the solution. In contrast, the American Psychological Association has challenged policymakers to give greater attention to the stresses faced by parent workers (Halpern 2004). While preschool is certainly needed and welcome, this intervention on its own will not solve the structural problems faced by working parents in America. For that, we need planners with a broader, more comprehensive view.

Feminists have long pointed out that most care is provided by the unpaid work of relatives. MacArthur Fellow Nancy Folbre, in her book *The Invisible Heart: Economics and Family Values* (2001), argues that care, reciprocity, and altruism are the foundation for human and community well being. Such nonmarket care also provides the foundation that enables the market to function. Blindness to the role of the unpaid, nonmarket care of parents and families (a role filled predominately by women) undermines the altruism on which such care is based. Gornick and Meyers, in their book *Families that Work* (2003), show how seriously the U.S. lags behind in workplace policies that support the dual roles of parents as workers and parents.

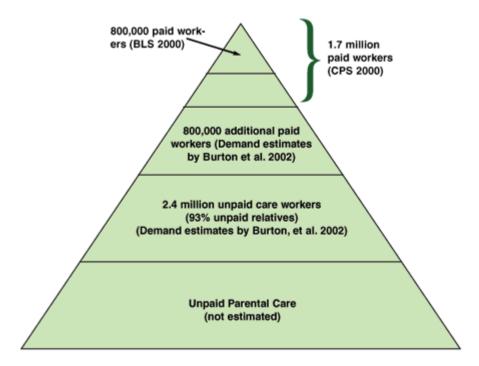
Understanding the Child Care Market

Before planners can begin to address the structural problems in the child care sector, they must first understand the full complexity of the child care market. The early care and education sector in America is composed of a mixture of center and family-based care, preschool programs, and after-school care. Some programs, such as Head Start or pre-kindergarten, are publicly supported and sometimes provided in public school settings. Other programs are based in nonprofit community-based centers or in family homes. There is a growing for-profit sector of center-based care. Additionally, parents rely on informal providers outside the regulated child care market for evening and weekend care, when formal options are either unavailable or too expensive. These providers play a critical role in supporting parent workers in the retail and service economy, but their wages are some of the lowest in the sector.

I liken the child care sector to an iceberg. At the top are the workers in the formal part of the sector — those workers captured in standard economic reports. Below them is an equally large number of workers who are

formal, regulated providers but are too small to be captured in standard economic census data. Below them are the large number of informal providers also not counted in economic data. The foundation of it all is unpaid relative and parental care. This unpaid care represents the majority of care — part of the unpaid household economy.

Figure 2: Counting Child Care Workers



Note: Based in part on Burton, A., Whitebrook, M., Young, M., Bellm, D., Wayne, C., Brandon, R., et al. (2002). *Estimating the Size and Components of the U.S. Child Care Workforce and Caregiving Population: Key Findings from the Child Care Workforce Estimate.*Washington, DC and Seattle: Center for the Child Care Workforce and Human Services Policy Center. Extrapolating from data on 6,936 households' use of out-of-home care for children aged 0-5, Burton et al. (2002) estimated the child care work force for this age group at 2.5 million paid workers. This estimate is considerably larger than the 800,000 estimate of the Bureau of Labor Statistics (BLS) (based on establishment reports), or the 1.7 million estimated by the Current Population Survey (CPS). They also calculated unpaid nonparental care to be an additional 2.5 million persons, 93 percent of whom are unpaid relatives. Although this unpaid care is not counted in standard economic accounts, it makes a substantial economic contribution. Unpaid parental care was not included in their estimates.

Because of this complexity — the mixture of formal, informal, and non-market care, and public, for-profit, and nonprofit providers — it has been difficult for economic developers to recognize the potential for economic development strategies to strengthen the sector. Attention to the public benefits in terms of long-term human capital development has caused most economists to focus solely on the preschool portion of the sector. But many business leaders see the lack of child care support for their workers as an immediate problem that begs for solution.

Most Fortune 500 companies have moved forward in exploring workplace policies that promote flexibility for parents and enhance access to care (Shellenback 2004). Sometimes this means subsidizing employees' child care expenses, buying spaces in child care centers, or providing onsite child care. Increasingly, business leaders are concluding that adequate child care supply should be a part of the social infrastructure for economic development — not the private problem of families or individual employers. As Tompkins County, New York, Chamber of Commerce President Jeanne McPheeters noted in a 2004 interview, "The business community does not believe that one parent should have to stay home to care for children. Child care supports both working parents — fathers and mothers."

Broadening Economic Development Policy Debates

The interest shown in child care by chambers of commerce reflects the concerns of business leaders. Since 2000, more than 50 states and localities have organized teams of child care leaders, government policymakers, and business leaders to assess the regional economic impact of the child care sector. (For a complete list of these state and local teams, visit economicdevelopment.cce.cornell.edu). These teams have relied on the advice of the Cornell

University team (available in Ribeiro and Warner 2004), the National Economic Development and Law Center in California, or local universities to conduct their studies. All teams have been frustrated by the inadequate picture of the sector that standard economic data provide. A complete discussion of these data problems is provided in Ribeiro and Warner (2004) and Warner (forthcoming).

Typically these studies describe the size of the sector — number and type of providers, children and parents served, prices and costs faced by parents, and relevant government supports, for example. Many studies describe the industries where parents work and use this to launch collaborations with those sectors. Special emphasis is often given to the role of government policy — especially with regard to subsidies to lower-income working parents — and how these subsidies could be enhanced or linked with business supports to enhance access and quality (Warner et al. 2003).

Most of the studies also go one step further and calculate the linkage or multiplier effect of child care on the state or regional economy. They find child care compares well in direct employment and in its linkage effects to other industries that are more typical targets of economic development policy. An analysis of all 50 states, using regional input-output models (IMPLAN), finds these relationships to be stable across states (Liu, Ribeiro, and Warner 2004; Warner and Liu 2005).

These results are not without their detractors. Some economists argue child care work should not be counted as a sector in the formal economy because it represents commodified household production. Some study teams have gone to great lengths to discount the education portion of the sector, arguing that only the portion of the sector that enables parents to work makes a contribution to the regional economy (BBC Research and Consulting 2003). However, most teams recognize that child care's economic contribution is broader and includes education for children, work supports for parents, and direct employment and regional linkage of the sector itself.

Planners are increasingly recognizing the important role that local service sectors play in direct employment, provision of needed services, and regional economic integration (Markusen 2004, Warner and Liu 2005). Housing, basic retail, and services designed for local consumption form a critical part of local quality of life (Clavel, Pitt, and Yin 1997). Many urban areas lack sufficient retail services to meet local demand (BCG and ICIC 1998). The same can be said of child care supply.

Recent economic development debates, stimulated in large measure by Richard Florida's 2002 book *The Rise of the Creative Class*, have given more attention to local quality of life. However, Florida's focus has been primarily on younger, generally childless, highly educated workers who enjoy entertainment, culture, and recreational amenities. Florida has not given attention to the workers who staff such venues. Many of these cultural and entertainment services are primary employers of working parents (Okuyama and Weber 2001). Planners recognize the need to invest in services that support the economy as a whole — both the creative sector and the sectors that support it.

Michael Porter (1995) has challenged planners to move beyond a focus on social supports and instead focus on the competitive industries in the regional economy. He argues that if planners focus on helping these industries become more competitive, then the additional resources necessary to enhance local services and quality of life will result from the enhanced profitability of the private sector. Planners have responded that social supports provide the foundation for economic development (Harrison and Glasmeier 1997). I argue that a balanced approach is needed, one that recognizes the power of export-focused sectors and the need for investment in quality of life and social supports for the broader population. Business leaders share a similar view in the concept of the "triple bottom line," a business theory that argues investment in social and environmental improvements will help long-term business profitability. As a society and an economy we have moved beyond simple solutions to recognize the complexity of economic and community development and the need for balanced strategies.

Economic Development Strategies to Promote Quality Child Care

So how can economic development strategies be employed to improve quality and access in the child care sector? First, we need to distinguish the challenges of an underdeveloped market, which can be addressed with economic development solutions, from the problems of market failure, which require government regulation and investment. Child care is both a public and private good. As a public good, society benefits from the long-term investment in human capital for the future workforce. We also benefit from the expanded earnings and career ladders that child care enables for working parents. Parents and the private market are likely to underinvest in quality child care because the benefits are distributed society-wide and appear over the long term. These market failures can be addressed with government regulations, to ensure quality subsidies that support access for parents, and direct subsidies to providers to promote professionalizing the sector and to underwrite the cost of

high quality care. As a sector, child care does not benefit from the substitution of capital for labor, and thus productivity (measured by the number of children served per teacher) is low. Low ratios ensure high-quality interaction and education. Competition has been shown to erode quality in care work because cost pressures encourage providers to increase the ratio of children to teachers (Folbre 2001). Thus, government regulatory and subsidy policy is critical to ensure quality.

However, there are many areas in the child care market where economic development policies could be applied with good effect. Recognizing that, as a private good, child care is purchased directly by parents, we can design policies to increase demand for quality by providing better market information to parents on the quality of different providers. Such information also would help reduce the search costs for parents as they seek convenient, high-quality care that meets their social and cultural preferences. The emergence of intermediaries to provide such information to parents also could help build better networks of communication among providers themselves. Most child care providers are small businesses that lack economies of scale. While the direct relationship between teacher and child should remain small to ensure the highest quality interaction, it is certainly possible to achieve economies of scale in the administrative functions: billing, purchasing, and human resource management (Stoney 2004a). It is also possible to use workforce development policy to support professionalizing the sector and creating wage and career ladders within the child care sector itself, and addressing the needs of working parents by providing child care when and where it is needed most. Examples are provided in Table 1.

TABLE 1: UNDERDEVELOPED MARKETS HAVE ECONOMIC DEVELOPMENT SOLUTIONS	
UNDERDEVELOPED AREAS OF THE CHILD CARE MARKET	ECONOMIC DEVELOPMENT SOLUTIONS
Most parents want high quality child care but are unable to afford it so their preference is not 'effective' in influencing the supply of child care in the market place.	Work/life policies, including on-site child care Vouchers/subsidies for child care from employers and the public sector Tax credits for businesses that support child care for their employees Tax credits for parents using child care
Low Profitability Low profitability leads to high turnover of child care staff Limited use of career ladders Ease of market entry for low-cost providers suppresses quality	Business Retention and Quality Enhancement Business retention and enhancement strategies for child care providers Investment capital to support start-up and expansion Wage and education incentives to promote both worker professionalization and provider retention Support for system-wide professional development and career ladders
Lack of Economies of Scale Many scattered small firms lack economies of scale and are economically fragile	Networks and Collective Management Networks and purchasing pools for information exchange and shared services Business management training and collective management strategies (pooled purchasing, shared recruitment and training) can enhance efficiency and increase profitability, enabling providers to focus more on direct care to children
Lack of Information Hard to assess quality and availability of care Limited return for investments in quality	Advertising and Coordination Stronger information intermediaries, advertising, and parent education Quality rating systems Loans, grants, tax-credits and reimbursement rates tied to quality to create appropriate market signals

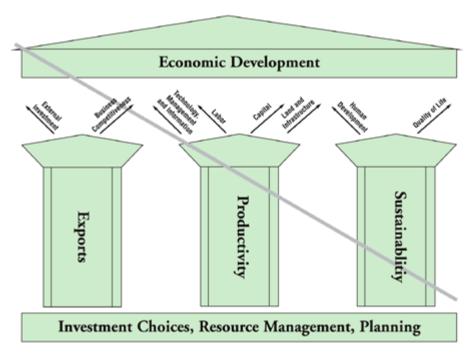
Source: Warner et al 2004. Economic Development Strategies to Support Quality Child Care

Economic development policy at the local level focuses primarily on export attraction strategies, such as tax abatements (Warner 2001). Such strategies can be applied to child care by providing tax credits to investors in child care. Texas, Colorado, and Oregon have experimented with such approaches, and these are described in more detail in *Economic Development Strategies to Promote Quality Child Care*.

However, economic development professionals recognize that export strategies have limited effectiveness, and investments in productivity are likely to yield greater economic development returns (Bartik 2003). Planners recognize that, in the long term, economic development is about sustainability and enhanced quality of life. The

purpose of economic development is community and human development as well as jobs and income. Figure 3 represents the three principles of economic development — exports, productivity, and sustainability — as the three pillars that hold up the roof of economic development. The roof is presented as if the three pillars are equal in height, but in reality, economic development policy at the local level is out of balance. The diagonal line shows the path the roof truly follows: it slants downward from exports, the primary strategy; to productivity investment, the secondary strategy; to sustainability, the least common approach to economic development. Incorporating child care in economic development has the greatest impact on productivity and sustainability, and as such it can help economic developers bring economic development policy back into balance.

Figure 3: Economic Development Principles and Strategies



Source: Warner et al 2004.

Planning Approaches Underway

Achieving this balance requires opening the economic development planning process to the child care community and bringing in child care experts to help with economic development planning. For example, Vermont now requires every town plan to include child care as one of 13 required elements. Local planning and development boards in that state are now working with child care experts to identify key data needs, problems, and policy interventions for the child care sector (Stoney 2004b). In California, similar planning efforts are being undertaken at the county and city level. Land-use rules that restrict the placement of child care centers are being challenged, and some communities are levying impact fees on new developers to ensure they build child care along with housing in new developments (Anderson 2005). More information on all these examples can be found in *Economic Development Strategies to Promote Quality Child Care*.

Transportation

Planners are beginning to link transportation and child care by recognizing the journey to work is actually a journey to child care, then work. In Tennessee, bus routes have been reorganized and retimed to enable parents to drop off children and proceed to work. In Florida and California, child care has been incorporated into the transportation planning process, and in some cases child care centers have been located within transit hubs, using Intermodal Surface Transportation Efficiency Act (ISTEA) dollars along with community development block grant (CDBG) funds to defray construction costs.

Housing and Business Development

Child care is an eligible investment under both the federal New Markets Tax Credit program and the CDBG program. In Wisconsin, many communities are now building child care centers as part of industrial parks.

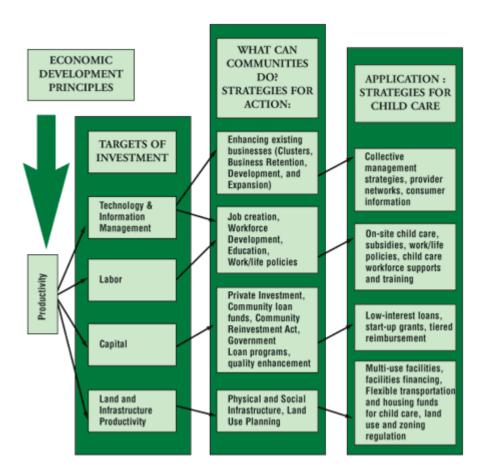
Financing

Perhaps the most work in connecting the child care sector to economic development has been done on facilities finance. Efforts have been made by organizations such as the National Children's Facilities Network; the Community Investment Collaborative for Kids, a program of the Local Initiatives Support Corporation (LISC) supported by the Annie E. Casey Foundation; and two community development financial institutions (CDFIs): Coastal Enterprises, Inc., in Maine, and Self Help in North Carolina. Attracting private sector investment from banks seeking to meet their Community Reinvestment Act requirements has helped open up financing for some child care businesses.

Productivity Strategies: Realizing Economies of Scale

Productivity strategies (see Figure 4) can be applied to the child care sector to help achieve economies of scale (Stoney 2004a). By recognizing child care as an economic sector in its own right, it is possible to apply business retention and expansion strategies. In Ohio, intermediaries have built pools of substitute teachers that are shared sector wide. In Virginia, a network provides managerial support to a wide range of home-based providers. In North Carolina, Wisconsin, and Pennsylvania, child care and workforce development experts are exploring the feasibility of using a private employer organization (PEO) as a model for providing health insurance and human resource management. All of these strategies are described in more detail in *Economic Development Strategies to Promote Quality Child Care*.

Figure 4: Economic Development Principles — Productivity



Source: Warner et al 2004.

In collaboration with the Alliance for Early Childhood Finance (experts on financing in the child care sector) and the Smart Start's National Technical Assistance Center (a networking and technical assistance provider to the child care sector nation-wide), Cornell University is supporting a learning community of child care providers and economic development professionals to address the importance of child care as an economic sector. The W.K. Kellogg Foundation has taken a lead in providing funds for venture grants at the community level, national conferences to share strategies, learning clusters networked via teleconferences, and publication of the resource guides produced by Cornell University.

Conclusion

As Jeanne McPheeters, President of the Tompkins County, New York, Chamber of Commerce, says, "(Child care) is more a community issue and not just a women's issue." Planners have a unique facilitating role to play in bringing together planning, economic development, business and early childhood expertise to strengthen the child care sector. The business and economic development communities are ready to engage, but it is critical they do so as partners with child care experts. Proposals must broaden the focus beyond targeted preschool programs to more adequately address the needs of children, parents, and their employers. Planners are in the perfect position to facilitate a broader dialogue and ensure the voices of parents and providers are not ignored. The interest is there, the time is ripe, and the background research has been done in many cities and states. The moment for leadership by planners has arrived.

Mildred Warner is an associate professor in Cornell University's Department of City and Regional Planning. Her research focuses on local economic development policy, local government and the role of social services in economic development.

The Cornell University team can be contacted at child care_econ@cornell.edu. Louise Stoney of the Alliance for Early Childhood Finance, Gerry Cobb of Smart Start, and Mildred Warner invite you to share your expertise and become part of the learning community.

This research was supported by the U.S. Department of Health and Human Services, Administration for Children and Families, Child Care Bureau research funds grant #90XC003, and by the U.S. Department of Agriculture Hatch Research Program administered by Cornell Agricultural Experiment Station Grant #NYC 121449. The W.K. Kellogg Foundation, in collaboration with Smart Start's National Technical Assistance Center, provides funding for outreach. The analysis and interpretations do not reflect policy or position of the funders.

For More Information

All of the materials referenced in this *PAS Memo* may be found on Cornell University's Linking Economic Development and Child Care Project website, but if you would like hard copies of the guides, please contact Smart Start at gcobb@smartstart-nc.org.

References

Anderson, Kristen. 2005. Planning for Child Care in California. Point Arena, Calif.: Solano Press Books.

Bartik, Timothy J. 2003. *Local Economic Development Policies*. Kalamazoo, Mich.: Upjohn Institute for Employment Research. www.upjohninstitute.org/publications/wp/03-91.pdf

BBC Research and Consulting. 2003. *Economic Impact of the Early Care and Education Industry in Larimer County*. Denver, Colo.: Larimer County Early Childhood Council. www.larimer.org/compass/early_care_impact.pdf

BCG (Boston Consulting Group, Inc.) and ICIC (Initiative for a Competitive Inner City). 1998. *The Business Case for Pursuing Retail Opportunities in the Inner City*. www.icic.org/vsm/bin/smRenderFS.php? PHPSESSID=61cd5543266ea038957922d1ef92cf31&cerror= click on Publications, and search by title.

Bernstein, Nina. October 19, 2003. "Daily Choice Turned Deadly: Children Left on Their Own." *The New York Times*.

Clavel, P., J. Pitt, and J. Yin. 1997. "The Community Option in Urban Policy." *Urban Affairs Review*. 32 (4): 435-458.

Committee for Economic Development. 2002. *Preschool for All: Investing in a Productive and Just Society.* www.ced.org/docs/report/preschool.pdf

Florida, Richard. 2002. The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life. New York: Basic Books.

Folbre, Nancy. 2001. The Invisible Heart: Economics and Family Values. New York: New Press.

Gornick, Janet C., and Marcia K. Meyers. 2003. *Families that Work: Policies for Reconciling Parenthood and Employment*. New York: Russell Sage Foundation Publications.

Halpern, Diane F. 2004. *Public Policy, Work, and Families: The Report of the APA Presidential Initiative on Work and Families.* Washington, D.C.: American Psychological Association. www.apa.org/work-family/fullreport.pdf

Harrington, Mona. 1999. Care and Equality: Inventing a New Family Politics. New York: Knopf.

Harrison, B., and A.K. Glasmeier. 1997. "Why business alone won't redevelop the inner city: A friendly critique of Michael Porter's approach to urban revitalization — Response." *Economic Development Quarterly*. 11 (1): 28-38.

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

Helburn, Suzanne W., and Barbara R. Bergmann. 2002. *America's Child Care Problem: The Way Out*. New York: Palgrave Macmillan.

Kamerman, Sheila B. 2001. "An Overview of ECEC Developments in OECD Countries," in S. Kamerman ed. *Early Childhood Education and Care: International Perspectives International Aspects of Social Policy.* New York: Columbia University Institute for Child and Family Policy. pp 11-54.

Liu, Z., R. Ribeiro, and M. Warner. 2004. *Comparing Child Care Multipliers in the Regional Economy: Analysis from 50 States*. Ithaca, N.Y.: Cornell University Department of City and Regional Planning. government.cce.cornell.edu/doc/pdf/50States.pdf

Lynch, Robert G. 2004. *Exceptional Returns: Economic, Fiscal and Social Benefits of Investment in Early Childhood Development*. Washington, D.C.: Economic Policy Institute.

Markusen, Ann. 2004. "Targeting Occupations in Regional and Community Economic Development." *Journal of the American Planning Association*. 70(3): 253-268.

Masse, Leonard N., and W. Steven Barnett. 2002. *A Benefit-Cost Analysis of the Abecedarian Early Childhood Intervention*. New Brunswick, N.J.: National Institute for Early Education Research. nieer.org/resources/research/AbecedarianStudy.pdf

Okuyama, Kumiko, and Roberta B. Weber. 2001. *Parents Receiving Child Care Subsidies: Where Do They Work?* Albany, Ore.: Linn-Benton Community College, Oregon Child Care Research Partnership. www.hhs.oregonstate.edu/familypolicy/occrp/publications/2001-Parents-Receiving-Child care-Subsidies.pdf

Porter, M.E. 1995. "The Competitive Advantage of the Inner City." Harvard Business Review, 73(3): 55-71.

Ribeiro, R., and M. Warner. 2004. *Measuring the Regional Economic Importance of Early Child Care and Education: The Cornell Methodology Guide*. Ithaca, N.Y.: Cornell University Department of City and Regional Planning. government.cce.cornell.edu/doc/pdf/MethodologyGuide.pdf

Rolnick, A., and R. Grunewald. 2003. "Early Childhood Development: Economic Development with a High Public Return." In *Fedgazette*: Federal Reserve Bank of Minneapolis. March. www.minneapolisfed.org/pubs/fedgaz/03-03/earlychild.cfm

Schultz, Theodore W. 1961. "Investment in Human Capital." The American Economic Review 51:1 (March): 1-17.

Schweinhart, L.J., J. Montie, Z. Xiang, W.S. Barnett, C.R. Belfield, and M. Nores. 2005. *Lifetime Effects: The High/Scope Perry Preschool Study Through Age 40*. Ypsilanti, Mich.: High/Scope Press.

Shellenback, Karen. 2004. *Child Care and Parent Productivity: Making the Business Case.* Ithaca, N.Y.: Cornell Department of City and Regional Planning. government.cce.cornell.edu/doc/pdf/Child careParentProductivity.pdf

Shore, Rima. 1997. *Rethinking the Brain: New Insights into Early Development*. New York: Families and Work Institute.

Stoney, L. 2004a. *Collective Management of Early Childhood Programs: Approaches that Aim to Maximize Efficiency, Help Improve Quality and Stabilize the Industry.* Raleigh, N.C.: Smart Start's National Technical Assistance Center and Cornell University Department of City and Regional Planning.

Stoney, L. 2004b. *Framing Child Care as Economic Development: Lessons from Early Studies*. Ithaca NY: Cornell University Department of City and Regional Planning. government.cce.cornell.edu/doc/pdf/FramingChild care.pdf

Warner, M.E. 2001. "Local Government Support for Community-Based Economic Development," In *The Municipal Year Book 2001*. Washington, D.C.: International City/County Management Association. pp. 21-27.

Warner, M.E., R. Ribeiro, and A.E. Smith. 2003. "Addressing the Affordability Gap: Framing Child Care as Economic Development." *Journal of Affordable Housing and Community Development Law*, 12(3): 294-313.

Warner, M.E., S. Adriance, N. Barai, J. Hallas, B. Markeson, and W. Soref. 2004. *Economic Development Strategies to Promote Quality Child Care*. Ithaca, NY: Cornell University Department of City and Regional Planning. government.cce.cornell.edu/doc/pdf/EconDevStrat.pdf

Warner, M.E., and Z. Liu. 2005. "The Importance of Child Care in Economic Development: A Comparative Analysis of Regional Economic Linkage." *Economic Development Quarterly* (forthcoming).

Warner, M.E. 2006. "Putting Child Care in the Regional Economy: Empirical and Conceptual Challenges Raised by Regional Economic Impact Studies." *Journal of the Community Development Society* (Forthcoming special issue on the economic importance of child care in the regional economy care).

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