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Sustainable Economic Development: The Role of Child Care

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POLICY BRIEF

This is the third in a series of brief introductions to policy issues that affect the citizens of New Jersey. The purpose of these briefs is to educate the public and alert New Jersey policy makers, both in Washington and Trenton. The briefs are not intended to be a comprehensive research project. Rather, they provide a broad overview of an issue, often based on information or reports that already exist, but which may have gone unnoticed.

SUSTAINABLE ECONOMIC DEVELOPMENT: THE ROLE OF CHILD CARE

Introduction

At this important historical moment for southern New Jersey, and more particularly for Atlantic City, multiple strategic approaches are being explored for fostering sustainable forms of local economic (re)development. The aim is to make the local economy more resilient—over the business cycle and in the long run. According to the Institute for Sustainable Communities (ISC):

> A sustainable community is one that is economically, environmentally, and socially healthy and resilient. It meets challenges through integrated solutions rather than through fragmented approaches that meet one of those goals at the expense of the others. And it takes a long-term perspective – one that's focused on both the present and future, well beyond the next budget or election cycle.[1]

Local and regional economic development strategies traditionally focus on maximizing production and income given existing resources within the community. *Sustainable* economic development, in contrast, recognizes that such resources are not necessarily inexhaustible. Therefore, economic development will only be sustained if there is continuous reinvestment in natural, human, and social capital, in addition to financial capital and manufactured (physical)

[1] Institute for Sustainable Communities n.d.

capital.[2] Economic sustainability is intertwined environmental and social sustainability because economic productivity is dependent on the availability of natural resources, the skills and training of the labor force, and a social and political context that facilitates economic goals.

Maintaining and increasing a community's stock of social, human, and natural capital generally necessitates some degree of planning and coordination by community stakeholders and leaders.[3] The child care sector provides a perfect example. According to several studies by the Cornell University Department of City and Regional Planning, the child care industry has a three-fold impact on regional economic development:

(1) It provides **social infrastructure** for parents and their employers, facilitating mothers' labor force participation and reducing turnover and absenteeism;
(2) It offers **long-term investments** by better preparing children (especially children from low-income families) to lead productive and fulfilling lives; and
(3) It represents an often overlooked network of **small businesses** that include non-profit, for-profit, and family providers who circulate income through the local economy, generating multiplier effects.

These benefits are what economists term *positive externalities* or *third-party effects*, because they accrue to people and institutions beyond the immediate providers of child care and their customers. Individual businesses are unable to charge third parties for these benefits, and therefore services with positive externalities cannot be provisioned solely through the profit

[2] The term "capital" is used by economists to describe economically productive resources. The term originally referred exclusively to manufactured capital such as buildings, machinery, and tools. Financial capital refers to the monies used for business investment. Economists focused on sustainability have added three previously neglected categories.
[3] Bent, Forinash, McKay, Perry, and Webber 2015

motive. Public policy interventions such as grants, subsidies, and tax credits are needed to grow social infrastructure.

This important economic sector is sometimes overlooked by planners captivated by allegedly more exciting industries. The importance of this sector, however, is gaining more attention. This policy brief summarizes the case for including child care investments in plans for redevelopment of the Atlantic City economy. It estimates the potential economic impact of expanding high-quality child care. It also discusses some of the limitations of current policy frames, many of which focus on expanding access to full *day* programs that operate during typical school hours. This ignores the rising prevalence of shift work, nonstandard hours, and unpredictable work schedules in service industries such as those that predominate in the Atlantic County region.

Key Findings

- A more sustainable path for the future of the southern New Jersey region will emphasize a planned shift toward more economically diverse and livable communities.
- Child care is one component of efforts to create sustainable communities that support intergenerational well-being and enhance the quality of life in local communities.
- Organized child care—which includes all forms of market-based child care services—is a $1.8 billion industry in the State of New Jersey. We estimate that child care directly contributes $4.64 million to the local region's gross domestic product.
- The child care sector is more conducive to sustainable economic development than many other sectors that are typically targetted by economic development planners. Empirical studies demonstrate that investments in child care generate larger multiplier effects

within local and regional economies than sectors where procurement monies and profits tend to be exported to other localities, U.S. states, or countries.

- There will be approximately 837 places in licensed child care centers in Atlantic City by the end of 2017. This number qualifies the city as a *child care desert* since this is only 26.4 percent of children under 5. (The definition of a child care desert is 33 percent.)
- Atlantic City would need at least an additional 220 places in center-based care to bring to meet the threshold where it would not be defined as a child care desert. This additional capacity should be considered a minimum target, one that does not accommodate potential expansion in the number of families moving to the city or increases in labor force participation.
- Atlantic City would need 2,094 places in center-based care, or an additional 1,257 places to meet a mid-range target of 66 percent capacity. Meeting this goal would require a substantial investment in resources, but would reap economic rewards.
- Affordability is also a problem for parents in southern New Jersey. The State's child care subsidy reimbursement rate is substantially less than the market rate for quality child care, leaving a financial burden for parents.
- Child Care Aware ranked Atlantic County 14th (of 21 counties) in affordability for infant care and 11th for preschooler care for female-headed families. In contrast, Atlantic County fared well for two-parent families, ranking 2nd in affordability for infant care and 1st for preschool care.
- Most child care facilities operate during traditional business hours despite business trends toward 24/7/364 operations and flexible scheduling. Working families need *flexible access* to formal, affordable, high-quality child care.

Sustainable Local Development Strategies

In the sustainable communities approach, economic development (or continuous growth) is not an end in itself. The ultimate objective is sustainable communities. Building sustainable communities means "a better quality of life for the whole community without compromising the wellbeing of other communities."[4] Wellbeing, measured at the level of a community, has various components, including economic security. Sustainable economic development, therefore, should be viewed as a means of achieving wellbeing by enhancing economic security.

Economic security is best achieved when a community has a diverse economic base, meaningful employment opportunities, and extensive local business ownership.[5] This is because sustainable communities both require and benefit from the multiplier effects of local expenditures by businesses and their employees. Income generated from wages and profits needs to be reinvested into the local economy. Economists refer to this process as a *virtuous cycle* of local income generation furthering economic growth. When businesses purchase inputs locally and employees spend a substantial portion of their income on local goods and services, this new round of purchases in turn creates more demand for local businesses. The income generated through each round of spending continues to prosper (or multiply). Some economic sectors, as will be elaborated below, are more conducive to sustainable economic development because empirical studies demonstrate that they generate larger multiplier effects within local and regional economies than sectors where procurement monies and profits tend to be exported to other localities, U.S. states, or countries.

[4] Institute for Sustainable Communities n.d.
[5] Institute for Sustainable Communities n.d.

Sustainable economic development can build on anchor institutions, especially those providing educational, health care, and other services that enhance community wellbeing and invest in future productivity.[6] Analysts refer to such institutions as "sticky capital." Anchor institutions are place-based, meaning their identity and constituencies are tightly bound to a geographical location. The anchor institutions model has been successfully adopted in numerous locations, leading to a wave of interest in "Eds and Meds." However, the most successful leveraging of anchor institutions has occurred where their expenditures have been used to nurture local small businesses and to diversify the economy.[7] In some instances, procurement policies are particularly targeted toward minority business enterprises (MBEs) and female business enterprises (FBEs). A few jurisdictions have emphasized cooperative enterprises, businesses that are owned by their members (often consumers) or workers. This leveraging process is an important step to ensure that the anchor institutions are not an end in themselves, but a means to diversifying the local economy. Comparisons of Atlantic City with other localities continuously demonstrate that industry diversification is correlated with resiliency, the ability to withstand or recover from economic shocks and downturns.[8]

In their report, *Better Plans for Better Places*, the ISC summarizes successful community initiatives that have generated best practices for sustainable local development. The key commonality of these initiatives was that they "put livability at the center."[9] In other words, people reside in livable communities. People also work there, with a diverse range of good jobs

[6] Serang, Thompson, and Howard 2013 and Zeuli, Ferguson, and Nijhuis 2014
[7] Serang, Thompson, and Howard 2013; Zeuli, Ferguson, and Nijhuis 2014; and Cooke 2017
[8] Cooke 2014 and Cooke 2017
[9] Bent, Forinash, McKay, Perry, and Webber 2015, 6

appropriate to their skills and interests. People have access to local services. People spend some of their leisure time and consumption spending locally, including on the arts, entertainment, and hospitality sectors as well as retail. And they are able to raise their families within the community—not just temporarily reside there during their twenties. Just as a vibrant community needs to diversify its industrial base, it also needs to avoid overreliance on millennials, the "creative class," or any individual demographic group. Finally, people in livable communities have the realistic option of retiring in place.

Thus, livable communities will also be multi-generational. Putting sustainability, and thus livability, at the center of economic development entails attracting residents from various demographic and income groups. Planning for livability incorporates a range of amenities and infrastructure geared toward multi-generational living.[10] Demographic trends support this reasoning; seniors over 65 and youth under 18 are projected to comprise over 40 percent of the US population by 2040.[11] These trends mean that caretaking responsibilities for the very young and the very old will continue to escalate for working families. By enhancing the quality of life in local communities, child care is one component of efforts to create sustainable communities that support intergenerational well-being. This, in turn, attracts families to move into, and businesses to relocate to, these livable, family-friendly communities.

Finally, while the *Better Plans for Better Places* report documents common elements to livability embraced by multiple communities, it also maintains that "Livable places are loved because they

[10] American Planning Association n.d.
[11] Warner, Homsy, and Greenhouse 2010, 1

are unique and special."[12] It is important to preserve historical, natural and cultural assets. For Atlantic City, this includes an historic connection with tourism. The leisure and hospitality sector has been a critical aspect of Atlantic City's identity since the first planks were laid down on the sand to create the historic Boardwalk in 1870.[13] The city's historic identity and culture of service can draw both tourists and residents. However, as indicated above, over-reliance on constant infusions of external monies from the hospitality sector leaves communities less resilient and more vulnerable to economic shocks, whether internal or external in origin. Atlantic City's demographic diversity is also a defining characteristic and an asset. A vibrant African American community has deep roots that took seed before the Great Migration to other northern cities. Waves of immigrants have created lives in the city's service-oriented economy for over a century. Redevelopment projects need to be attentive to the insights, experiences, cultural offerings, and needs of these local residents.

Child Care as Social Infrastructure

The policy frames used to discuss preschool children have evolved into two separate tracks. One track focuses on early childhood education. The primary concern of policy advocates within this frame has been poor children. Early childhood education programs—including, for example, Head Start and Early Head Start—are proposed as solutions to uneven preparation for schooling for children from low-income families. These programs are means-tested. The second track focuses on child care for working parents. Child care, until recently, was viewed as little more than babysitting. Support for public provisioning of child care has been relatively limited because care for children has been viewed "as a personal concern rather than a social

[12] Bent, Forinash, McKay, Perry, and Webber 2015, 7
[13] Mutari and Figart 2015

responsibility."[14] The one exception has been, once again, a concern with the mothers of poor children. Since passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, there has been an increase in funding for child care, primarily through Child Care Block Development Grants, to coincide with the work requirements under "welfare reform." This separation of education from care is artificial and detrimental to developing good policy. As noted by the US Chamber of Commerce Foundation in a June 2017 report, "Childcare *is* early education, regardless of the building it occurs in or what we call it."[15]

Since 2000, the policy frame for child care policy has been dramatically revised to focus attention on the economic benefits of child care. Examining child care from this frame does not ignore the other dimensions of early childhood education and assistance for working parents. Instead, it broadens the discussion beyond a focus on poor families while it sharpens the arguments for why child care is a societal concern.[16]

Much of the earliest research on the economic development potential of child care was pioneered by a major project at Cornell University's Department of City and Regional Planning between 2002 and 2010. The "Linking Economic Development and Child Care Research Project" was funded by the W.K. Kellogg Foundation, the U.S. Department of Health and Human Services, and other funders. The objective of this project was to raise awareness of child care and early childhood development as an economic sector and to explore better ways of financing

[14] Palley and Shdaimah 2014, 1
[15] Stevens 2017, 1
[16] Palley and Shdaimah 2014

investments in this critical social infrastructure. The Cornell project developed a logo of a trillium flower with three petals to symbolize the benefits of child care provisioning for families, children, and regional economies. Their research agenda sought to investigate the role of child care services in enhancing jobs and income, human development, and sustainability:[17]

(1) It provides **social infrastructure** for parents and their employers, facilitating mothers' labor force participation and reducing turnover and absenteeism; [18]
(2) It offers **long-term investments** by better preparing children (especially children from low-income families) to lead productive and fulfilling lives; and
(3) It represents an often overlooked network of **small businesses** that include non-profit, for-profit, and family providers who circulate income through the local economy, generating multiplier effects.

This message is gaining support. In June 2017, the US Chamber of Commerce Foundation, for example, released a new study, *Workforce of Today, Workforce of Tomorrow: The Business Case for Child Care*. They are launching an initiative to explore how high-quality child care strengthens the current and future work force.[19]

The Comparative Multiplier Effect of Child Care Expenditures

Macroeconomists and regional development economists have long recognized the importance of multiplier effects: "Multipliers measure the extent to which purchases of goods and services in one sector stimulate activity in other sectors of the regional economy."[20] Demand-oriented

[17] Warner, Adriance, Barai, Hallas, Markeson, Morrissey, and Soref 2004
[18] See also Brown and Traill 2006 and Gould and Schieder 2016
[19] Stevens 2017, 1
[20] Liu, Ribeiro, and Warner 2004, 2

multiplier analysis is based on the argument that it is demand for goods and services by consumers and other businesses that ultimately determines the level of production in any industry. When incomes rise, so does demand and this is how economies grow. Therefore, additions to income from business investment or government expenditures (or additions to income from tax cuts) are recycled through an economy via multiple rounds of expenditures. The total impact on a national or regional economy is generally a bit larger than the initial expenditure (or tax cut). The factor used to determine how much larger is called a multiplier. Multipliers can be estimated to determine the total increase in income and the total increase in employment for a country or region.

In the classic example, if the federal government hires a company for an infrastructure project, this first round of expenditure provides additional income to the contractor. The contracting company will use some of this income to hire additional employees (or increase hours of existing employees), purchase supplies from its suppliers, and, presumably, take some of the income in profits—a round of spending. In the second spending round, the company's employees may be able to afford to go out to dinner more often, boosting demand at a local restaurant. The restaurant's increased income generates a third round of spending. Similarly, the contractor's suppliers also have more income to spend, and may also be encouraged to increase their employees' hours, increasing their income and thus their spending. And the original contractor's own increased profits may be reinvested in the business or increase consumption for his or her family. In each round, some of the new income may be saved, spent on imports, or otherwise "leak" out of the process, reducing the amount of spending in subsequent rounds. National multipliers, therefore, tend to be larger than state multipliers, and state multipliers are larger than local ones, because they capture spending leakages on goods and services from outside the local economy.

Similarly, subsidies and other funds invested in child care services have an initial *direct effect* of providing an important social infrastructure for employers and employees. In addition, there are four types of multiplier effects. When a child care center purchases paper products from other local businesses, this demand increases income to those other businesses (*indirect effects*). The largest categories of purchases by child care centers are real estate and manufactured goods.[21] The size of the economic impact (direct plus indirect effects) is calculated using a Type I output multiplier. A Type II output multiplier also picks up the economic impact of the child care center employees using their earned income to get their hair and nails done more often (*induced effects*). As a labor-intensive industry, employee compensation represents almost 44 percent of the costs of providing child care services.[22] The Type I and Type II multipliers are expressed as follows:

Type I multiplier = (direct effects + indirect effects)/direct effects

Type II multipliers = (direct effects + indirect effects + induced effects)/direct effects

In addition to the two output multipliers, there are Type I and Type II employment multipliers with similar formulas. The Type I employment multiplier tells us how many jobs are stimulated by the local purchases of the child care center. The Type II employment multiplier includes these effects, and adds the employment created in other sectors by child care employee spending (for

[21] Region Track 2015, 38
[22] Region Track 2015, 38

example, at the beauty salon). Thus, the Type II employment multiplier allows us to estimate the total job creation that arises from each additional child care worker hired.

In 2004, Cornell University's "Linking Economic Development and Child Care Research Project," published the results of a major study on the multiplier effects of child care expenditures.[23] The project's calculations of Type I and Type II multipliers were based on input-output analysis using IMPLAN, an economic impact assessment software used by business, government and academia. IMPLAN uses real economic data from the federal, state, and county levels, though not all data is available at all levels. The software was utilized to calculate production functions for the child care industry in each of the 50 states and the District of Columbia.[24] The project found that the child care sector compared favorably with other sectors that usually draw economic development investment funding, as summarized in the tables below.

Child Care Multipliers: New Jersey and the U.S. State Average (50 States and DC)

	Output Multipliers		Employment Multipliers	
	Type I	Type II	Type I	Type II
New Jersey (IMPLAN)	1.46	1.91	1.21	1.43
New Jersey (RIMS II)	1.50	2.12	1.21	1.45
U.S. Average (IMPLAN)	1.49	1.91	1.27	1.50
U.S. Average (RIMS II)	1.43	2.00	1.18	1.40

Source: IMPLAN from Liu et al. (2004: Tables 3.1 and 3.2); RIMS II from Region Track (2015: Figure 27)

[23] Liu, Ribeiro, and Warner 2004

[24] The methodology focuses on the stimulatory effects of backward linkages (purchases by the child care centers in order to operate their businesses) rather than the forward linkages of stimulating production in other businesses through lower absenteeism, increased employee productivity and morale, and human capital growth.

The first table demonstrates that New Jersey's child care multipliers are similar to the average of all multipliers for 50 states and the District of Columbia. For comparison, this table also presents child care multipliers from a more recent study by the Committee for Economic Development of the Conference Board.[25] This 2015 study on *Child Care in State Economies* uses the other major source for multipliers, the U.S. Bureau of Economic Analysis' Regional Input-Output Modeling System or RIMS II. One methodological difference is that the U.S. averages for the RIMS II child care multipliers are weighted by the size of the state. It should also be noted that the 50-state averages listed in the table are different than the national multipliers for the U.S. as a whole (which capture leakages across state lines).

The child care multipliers for the two studies are also remarkably consistent. In IMPLAN-based study, a 1.91 Type II output multiplier means that every dollar spent on child care in New Jersey generates almost another dollar in output through indirect and induced effects. Thus, a $1 direct expenditure would be multiplied by 1.91 to find the total change in output of $1.91 (which includes $1 in direct expenditures + $.91 in indirect and induced spending). In the RIMS II analysis, every dollar spend on child care in New Jersey generates $1.12 in output in other industries, for a total increase in output of $2.12. These impacts add up. A New Jersey fact sheet based on the Conference Board study notes that "$1.8 billion in direct output generated within the organized child care industry is estimated to support about $2 billion in additional indirect and induced output in other industry sectors, for an estimated combined total of approximately

[25] Region Track 2015.

$3.8 billion in output in New Jersey's economy."[26] The employment multipliers are smaller, but still indicate that there are spillover effects that create jobs. For New Jersey as a whole, the Conference Board study estimates that 50,780 proprietors and employees in the organized child care sector generate another $22,900 jobs in other industries.

The second and third tables condense the Cornell study's findings to compare the multiplier impacts of the child care industry with those of other industries. The Conference Board study does not contain these industry comparisons. They comparisons are only available as U.S. averages, but since New Jersey's child care multipliers track close to the U.S. averages, it can be reasonably assumed that these comparisons are relevant for New Jersey as well.

A Comparison of Multipliers in 10 Aggregated Sectors: U.S. State Averages

Sector	Output Multipliers		Employment Multipliers	
	Type I	Type II	Type I	Type II
Agriculture	1.34	1.63	1.27	1.50
Child Care	**1.49**	**1.91**	**1.27**	**1.50**
Construction	1.35	1.73	1.45	2.03
Fire, Insurance, & Real Estate	1.25	1.64	1.47	1.99
Manufacturing	1.31	1.61	1.47	2.07
Mineral	1.28	1.59	1.35	1.98
Public Administration	1.19	1.71	1.18	1.82
Retail	1.17	1.59	1.07	1.31
Services	1.29	1.79	1.18	1.49
Transportation, Communication, & Utilities	1.29	1.67	1.58	2.40

Source: Liu et al. (2004: Table 3.3)

[26] Committee for Economic Development 2015

The aggregated sectors that have stronger local output multiplier effects than other broad industries include construction, agriculture, and manufacturing. The strongest employment multipliers are found in transportation, communication and utilities; manufacturing; "FIRE;" and construction. The Type I and Type II output multipliers are much higher for the child care industry than for any of these broad industry categories. The employment generation is in the mid-range, but higher than the service sector as a whole.

A Comparison of Multipliers among Selected Sectors: U.S. State Averages

Infrastructure Sectors	Output Multipliers		Employment Multipliers	
	Type I	Type II	Type I	Type II
Child Care	**1.49**	**1.91**	**1.27**	**1.50**
Colleges & Universities	1.22	1.84	1.09	1.37
Elementary & Secondary Schools	1.30	1.91	1.10	1.31
Hospitals	1.25	1.79	1.19	1.67
Job Training & Related Services	1.32	1.84	1.23	1.50
Local Interurban Passenger Transit	1.26	1.72	1.10	1.35
Water Supply & Sewage Systems	1.33	1.67	1.84	2.68
Service Sector Industries	Output Multipliers		Employment Multipliers	
	Type I	Type II	Type I	Type II
Amusement & Recreation	1.28	1.69	1.11	1.26
Business Services	1.34	1.81	1.38	1.91
Child Care	**1.49**	**1.91**	**1.27**	**1.50**
Eating & Drinking Establishments	1.34	1.72	1.13	1.31
Financial Services	1.24	1.48	1.53	2.20
Retail & Accessory Stores	1.22	1.60	1.10	1.30
Tourism	1.31	1.71	1.21	1.50

Source: Liu et al. (2004: Table 3.4, Table 3.5, and 3.6)

When child care expenditures are compared with other detailed industries, the sector's economic benefits are even more apparent. Typical infrastructure investments focus on industries such as transportation or utilities. The Type II output multipliers for local interurban passenger transit and for water supply and sewage systems are 1.72 and 1.67, respectively, compared with 1.91 for child care. Education, both at the K-12 and collegiate levels, also generate strong output multipliers, 1.91 and 1.84, respectively. Water and sewage utilities have the highest employment multipliers (2.68), with hospitals also generating jobs in other industries (1.67). But child care, along with job training services, still generate another job for every two hires within the industry.[27]

The bottom half of the table shows the relatively potent economic impact of child care compared with many other service sector industries. The Atlantic City economy has long been dominated by industries such as amusement and recreation; eating and drinking establishments; and tourism—all of which have lower ripple effects on other local industries. Only business services comes close to having the strong impact on local economic development of child care. Financial services and business services are stronger job creators, but child care still outpaces most of the traditional leisure and hospitality service sectors—though it is tied with tourism at 1.50.

There are reasons for the relatively strong spillover effects generated from the child care sector. The Cornell researchers note that child care centers tend to depend on local inter-industry purchases to a greater degree than other industries, which explains the relatively high Type I output multipliers. Ironically, the Type II output multipliers are high because of relatively low wages in the child care sector. Lower-income households tend to shop locally and travel less.[28] These multipliers indicate that child care can be an economic driver in multiple channels. The

[27] Keep in mind that these multipliers capture backward linkages, not the positive forward linkages that infrastructure provides for an economy.
[28] Liu, Ribeiro, and Warner 2004, 39

next section considers how we might apply these lessons to revitalizing the economies of southern New Jersey.

Child Care Services in Atlantic City and Surrounding Communities

In the State of New Jersey, organized child care—which includes all forms of market-based child care services—is a $1.8 billion industry, comprising .35 percent of the state's gross domestic product.[29] Assuming that the industry has a comparable share in the Atlantic City-Hammonton Metropolitan Statistical Area, we estimate that child care directly contributes $4.64 million to the local region's GDP.[30] The output multipliers from the previous section enable us to also estimate the total contribution of this sector to the region's GDP.

	IMPLAN Model	RIMS II Model
Direct effect	$4.63 million	$4.63 million
NJ Type II output multiplier	1.91	2.12
Total economic effect	$8.84 million	$9.82 million

The same direct expenditures channeled to the retail sector would only generate $5.65 million in economic activity. Similarly, the same direct expenditures channeled to the tourism sector would generate $6.07 million. These are the implications of the lower output multipliers for these sectors.[31]

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[29] Committee for Economic Development 2015. This 2012 data is the most recent available.
[30] Author's calculations based on US Bureau of Economic Statistics data
[31] As noted in the previous section, the retail Type II multiplier is 1.22 and the tourism multiplier is 1.31.

And child care is a sector that is ripe for expansion. There is a shortage of high-quality, center-based child care. Focusing narrowly on Atlantic City, nine licensed child care centers have official listings with the State of New Jersey and a national registry.[32] They have a combined capacity for 740 children.

Licensed Child Care Centers in Atlantic City and Who They Serve

Name	Ages	Capacity
Adventures in Learning	0 to 13	50
Atlantic City Day Nursery	0 to 6	87
Boys and Girls Club of Atlantic City	6 to 13	200
Chelsea Heights Head Start	0 to 6	44
Providence Pediatric Medical Day Care, Inc.	0 to 6	56
Robinson Small Learning Center	0 to 13	66
Tennant's Day Care Center	2 ½ to 13	28
The Salvation Army	6 to 13	50
Usry Head Start Center	0 to 6	159
TOTAL		**740**

Source: State of New Jersey Open Data Center and ChildCareCenter.US

This situation is in flux. Several centers were damaged by Superstorm Sandy, and this has meant that some children are temporarily attending a program in the neighboring city of Ventnor. Relief funds are being utilized to build a new facility that will be owned and operated by Gateway Community Action Partnership, an organization that already runs Head Start programs throughout southern New Jersey, including in Atlantic City. The new center will have a capacity for 300 students; however this is not completely a net gain. The Bacharach Boulevard facility will absorb students from the Usry and Chelsea Head Start Centers, as well as those students

[32] Data on family-based providers, even those who voluntarily register, was not available. Such providers can care for up to five children in their home. Home-based child care has only voluntary licensing, so quality is inconsistent.

who are temporarily receiving care in Ventnor.[33] This means that by the end of 2017, there should be approximately 837 places in licensed child care centers in the city.

The following tables provide a summary of how the child care multipliers allow us to estimate the economic impact of this one additional child care center. We can utilize the publicly available expected employment at the new Gateway Center and the employment multiplier to calculate the total projected job creation. In addition, the Gateway Center's local expenditures would also impact local economy. Because we do not have data on their operating budget, this multiplier impact cannot be determined at this time. However, if we assume that salaries are 44 percent of their operating budget (the percentage found in the Conference Board study discussed in the previous section), we can obtain a reasonable estimate the total impact on output.

Estimated Economic Impact of Gateway Head Start Early Education Center

Expected employment[34]	60 employees
NJ child care IMPLAN employment multiplier	1.21
Total projected job creation	73 jobs

Median salary of NJ child care workers[35]	$ 21,510
Total estimated labor expenditures (median x 60)	$1,290,600
Total estimated operating budget (based on labor expenses)	$2,933,182
NJ Type II IMPLAN output multiplier	1.91
Total regional impact	$5,602,378

[33] D'Amico 2015
[34] D'Amico 2015
[35] Economic Policy Institute 2016

Thus, this one child care center would be expected to contribute over $5 million to the local economy indirect, indirect, and induced spending.

But even when the new center is operational, Atlantic City's center-based child care capacity will be less than optimal. In fact, Atlantic City would qualify as a *child care desert* under a definition proffered by the Center for American Progress (CAP) in a 2016 study.[36] By their definition, a community (defined by zip code) is a child care desert if there are more than 30 children and the ratio of children to cumulative child care center capacity is less than 3:1. The 2015 American Community Survey estimates there are approximately 3,173 children under the age of 5 within the city.[37] This would suggest that at most 26.4 percent of Atlantic City's preschool children can receive center-based care by the end of this year. Nationwide, the Census Bureau indicates that 23.5 percent of preschool children receive center-based care, so Atlantic City will be slightly ahead of the national average.[38] **To bring Atlantic City to the threshold where it would not be a child care desert, however, the city would need at least an additional 220 places in center-based care.** This should be considered a minimum target, one that does not accommodate expansion in the number of families moving to the city or the labor force participation rate.

Determining an upper-bound target is more challenging and is ultimately something that should be determined by community stakeholders. However, a 2016 fact sheet on "Early Learning in

[36] Malik, Hamm, Adamu, and Morrissey 2016, 2
[37] This is the most recent available data, downloaded from the American Fact Finder on the Census Bureau website.
[38] Laughlin 2013, 2

New Jersey" notes that 66 percent of preschool-age children have "all available parents in the workforce."[39] Setting aside the goals of population growth and increasing labor force participation, 66 percent (or two-thirds) could be established as a mid-range target. **In this case, Atlantic City would need 2,094 places in center-based care, or an additional 1,257 places.** Meeting this goal would require a substantial investment in resources, but would reap economic rewards.

One way to expand high-quality child care would be for the city to embrace a voluntary universal pre-kindergarten program for four-year-olds—or more generously, for three-year-olds as well.[40] The Hughes Center survey of policy tolerance toward specific interventions to alleviate economic inequality found that 68 to 69 percent of respondents would favor either a federally or state financed universal pre-K program.[41] While such a program would not fully address the needs of shift workers, it would provide beneficial support for human capital development via early childhood education.[42] Children who moved into the program would free up places in existing child care centers for younger children. The Abbott District preschool program in New Jersey—which does not include Atlantic City—is considered a model for other cities and states.[43] The state has already experimented with expanding preschool programs to non-Abbott districts, but funding has been limited.[44] Expanding the Abbott and similar programs throughout New Jersey, or instituting a program in Atlantic City, would be one way to address deficiencies.

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[39] Troe 2016
[40] Troe 2016
[41] Sloane 2016, 15
[42] Bartik 2014 and Chaudry, Morrissey, Weiland, and Yoshikawa 2017
[43] Frede and Barnett 2011, Mead 2014 and Troe 2016
[44] Levin and Horowitz 2013 and NIEER 2016

The Challenge of Affordability

Affordability is another critical concern for families in southern New Jersey, especially for female-headed families. The annual cost of full-time center-based child care in Atlantic County averaged $8,500 to $9,600 per child in 2013 (the most recent available survey of market rates). Family-based care is only slightly more affordable, ranging from $6,800 to $7,600 per year. While these market rates are less expensive than in wealthier New Jersey counties, median incomes are also lower. Atlantic County ranked 14th (of 21 counties) in affordability for infant care and 11th for preschooler care for female-headed families. Child Care Aware calculated these rankings by comparing the market rate for full-time care in licensed child care centers with median income in each county. In contrast, Atlantic County fared well for two-parent families, ranking 2nd in affordability for infant care and 1st for preschool care.[45] For New Jersey as a whole, center-based infant care would take a 13 percent bite out of median family income, which is 3 percentage points more than the 10 percent target recommended by the US Department of Health and Human Services.[46]

The bite is far bigger for Atlantic City residents, whose median family income is only $30,881. Paying outright for either family-based or center-based care for one child would consume anywhere from 22 to 31 percent of the "median family's" annual budget.[47] This is why so many families either rely on family and friends or utilize subsidies.

[45] NJACCRRA 2013, 7-8
[46] Economic Policy Institute 2016. HHS is lowering the target to 7 percent.
[47] Median family income is from the US Census Bureau's American Community Survey.

Child Care and Development Fund subsidies, a federal program administered by the states, are the key policy intervention designed to remedy the affordability problem. Families are responsible for a copayment based on income, family size, and the number of children in care. Current funding, however, is inadequate compared with need. One problem is that the income threshold for child care assistance income eligibility in New Jersey is lower than the federally recommended level of 85 percent of state median income.[48] Further, New Jersey's child care subsidy reimbursement rates have not been increased by the state's Department of Human Services since 2008. Focusing on full-time care in licensed child care centers (instead of home care), the rate is $160.60 per week for infants and $121.60 for preschoolers, according to the organization Child Care Aware of New Jersey (formerly known as the New Jersey Association of Child Care Resource and Referral Agencies). These reimbursement rates are substantially below the market price of child care services in all New Jersey counties, leaving a financial burden for parents. In Atlantic County, for example, the reimbursement rate was only 79.5 percent of the market rate for center-based infant care, according to the most recent analysis.[49]

Child care affordability is a struggle for the working poor, as well those whose income falls below the (inadequate) official federal poverty line. For example, the United Way focuses on a group that it terms "Asset Limited, Income Constrained, Employed" or "ALICE." ALICE households are employed but do not earn enough income to provide an adequate budget for meeting basic needs. Like the federal poverty lines, the ALICE thresholds vary with the size of the household and the ages of its members, but they are calculated for individual states and counties based on the local cost-of-living. While 14 percent of Atlantic County's households fall

[48] Center for the Study of Child Care Employment 2016
[49] NJACCRRA 2013, 14-16 and NJACCRRA 2014, 2

below the federal poverty line, an additional 28 percent of the county's households are ALICE. In Atlantic City, 72 percent of households are either officially poor (33 percent) or ALICE (39 percent). The ALICE study examines the gaps between a Household Survival Budget and available income from various sources, including assistance from government and nonprofits. The working poor ALICE households in New Jersey would only have approximately half the funds needed for home-based child care, even after factoring in the available subsidies. Center-based care is completely out of reach.[50]

The challenge of a 24/7 service economy

In a 2015 qualitative study of the lives of Atlantic City's casino workers, employees told numerous stories about the challenges of raising children while working in an industry that operates 24 hours per day, 7 days per week, 365 days per year. Many employees resort to informal caregiving by relatives due to the limited hours of formal child care. In one particularly poignant story, Inez (pseudonym) discussed passing her children between herself and her brother like a baton in a relay race as she

Box 1. Child Care for Gamblers and Their Dealers

Visitors to Las Vegas who have children can easily google "casinos that offer child care services." Child care has been an amenity offered for decades to attract gamblers in a competitive market for gaming customers. But what about the frontline workers serving those customers? Growing competition for workers led two Las Vegas casinos to duel each other to open the first child care center for employees in the spring of 2000. According to the *Las Vegas Sun*, the Venetian beat Station Casinos to the punch, by opening their center on April 26, 2000, and claiming it as the first-ever child care center for casino employees nationwide. The center is operated by New Horizon Kids Quest, Inc.

When the center opened at the Venetian, child care was available from 6 am until midnight. It took several more years for grave shift workers to be able to obtain overnight child care. By 2006, Clark County, Nevada (home of Las Vegas) had 12 child care centers licensed by the State Department of Health and Human Services for 24-hour service.

Another national brand operates a childcare center for MGM, owner of several casinos on the Las Vegas strip. Children's Choice Learning Center is located at the MGM Grand, where MGM employees are offered discounts. (The center is open to other Las Vegas strip employees, too). It was acquired by Bright Horizons Family Solutions® in 2013. MGM's center is open 24 hours and takes children aged 6 weeks to 12 years. This is an advantage over centers that cater to preschoolers. And it is also open to mildly ill children, calling it a "Sniffles and Snuggles" program.

Sources: David Strow, "Venetian, Station Casinos tout employee child-care centers," *Las Vegas Sun*, April 27, 2000, and "Child Care fills 24/7 needs," *Las Vegas Sun*, June 28, 2006.

[50] United Way of Northern New Jersey 2016, 26-27 and 61-62. The gaps are only calculated statewide.

got off her casino shift and he started his; the children wound up briefly (and illegally) on the casino floor and she had to beg security not to turn her in.[51]

Such stories provide anecdotal support of a growing problem confronting employees—and their employers—in industries that operate during nonstandard hours. This problem extends beyond casinos and the leisure and hospitality industry to include hospitals with around-the-clock shifts, universities offering evening classes, and retail outlets that are open nights and weekends—all major employers in southern New Jersey. In addition to this trend, there is also a rise in variable work schedules with unpredictable hours, especially in retail.[52] Finally, the shift to a "gig economy," means that more workers are not employees; instead, more are freelancers or contract workers who offer their services via online intermediaries.[53] According the Child Care Aware of America, more than one-fifth of parents with a child under the age of 13 work nonstandard schedules, and these are often the workers with fewer economic resources to pay for high-quality care.[54] Therefore, shift work, nonstandard hours, on-call scheduling, and other practices that do not provide parents with 9-to-5 work schedules are disruptive for working families.[55]

Despite these business trends toward flexibilization, most child care facilities operate during traditional business hours. This incongruence pressures families out of the organized child care market. Parents may be unable to apply for subsidies because they require a consistent minimum

[51] Mutari and Figart 2015, 111-113
[52] Henly and Lambert 2014 and Alexander and Haley-Lock 2015
[53] Katz and Krueger 2016
[54] Child Care Aware of America 2016
[55] Henly and Lambert 2014, Boushey 2015, and Morsy and Rothstein 2015

number of weekly work hours.[56] The Census Bureau data indicates that 38.7 percent of preschool children have no regular arrangement for care while their primary caretaker is at work.[57] The percentage is presumably higher in Atlantic City, where so much of the local economy is based on industries with shift work and irregular hours.

Further, many current policy proposals, including the expansion of universal pre-Kindergarten, focus on expanding access to full *day* programs that operate during typical school hours, ignoring the rising prevalence of shift work, nonstandard hours, and unpredictable work schedules, particularly in the service sector. While the policies proposed by these advocates have value, universal pre-K programs may disproportionately benefit workers in professional occupations. In contrast, working-class families need *flexible access* to formal, affordable, high-quality child care. One possible solution is employer-based licensed child care, as exemplified by the Las Vegas casinos described in Box 1.

In order to enhance Atlantic City as a sustainable community, three issues must be addressed by planners and policy makers: (1) the availability of organized child care; (2) the affordability of this care; and (3) the provisioning of flexibly scheduled care to meet the needs of parents and employers in a modern economy. These issues are examined in more detail in the final section.

Conclusion

> Communities are constantly in flux. They experience periods of prosperity and investment, periods of disruption and challenge, and periods of renewal and

[56] Child Care Aware of America 2016, 15 and Rachidi 2015.
[57] Laughlin 2013, 2

> reinvention. The communities that are most resilient and able to grow stronger as they endure these changes are those that have clearly articulated visions for where they are headed and that periodically revisit and revise these visions. (Institute for Sustainable Communities)[58]

Formal, market-based child care is not a huge industry, and economic development planners will not turn around a regional economy just by investing in child care services. The analyses presented in this policy brief, however, indicate that it can be an important piece of a shift toward sustainable economic development policies. Child care provides forward linkages through its role in facilitating labor force participation and work force stabilization. High-quality child care is a long-term investment in a region's human capital. Finally, the oft-overlooked sector has stronger positive spillover effects than many industries that are more frequently the subject of conversation in economic development plans. It contributes to the goal of creating livable communities.

The Economic Policy Institute recently posed the question "What does good child care reform look like?"[59] They suggest three principles that should guide policy-makers:

1. **Organized child care policies need to be developed in tandem with policies that enable parents to temporarily stay at home with infants, newly adopted children, and new foster children.** A uniform paid leave policy on the federal, state, or local level would alleviate the disparities in our current system, where more affluent workers disproportionately take leave. These disparities perpetuate income inequality. A 2016

[58] Bent, Forinash, McKay, Perry, and Webber 2015, 6
[59] Gould, Austin, and Whitebrook 2017

study by the William J. Hughes Center for Public Policy found that 80 percent of New Jersey survey respondents support a paid family leave policy.[60]

2. **High-quality child care needs to be affordable for families of all income levels.** The U.S. Department of Health and Human Services considers 7 to 10 percent of a family's income affordable. Using the 10 percent threshold, only two states—South Dakota and Wyoming—provide affordable care for the median family income.[61] While poor families, especially the working poor, are often highlighted in policy frames about child care, middle-class families are often best positioned to take advantage of interventions such as tax credits. Child Care Aware of New Jersey has several recommendations specifically designed to address these affordability issues.[62]

3. **High-quality child care depends on investing in the industry's workforce.** As a labor-intensive industry, quality child care with a low child-to-teacher ratio is expensive. Affordability cannot mean cost-cutting. Rather, upgrading the compensation and working conditions of child care workers will encourage more qualified applicants and reduce turnover.[63] Reduced turnover is important for enabling young children to bond with their caretakers.

One more principle should be added to this list: high-quality child care should accommodate the economic transition away from standard work hours and schedules, providing the flexible

[60] Sloane 2016, 15
[61] Whitebrook, McLean, and Austin 2016
[62] Child Care Aware of New Jersey 2017
[63] Whitebrook, McLean, and Austin 2016

access that today's working families need.

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