



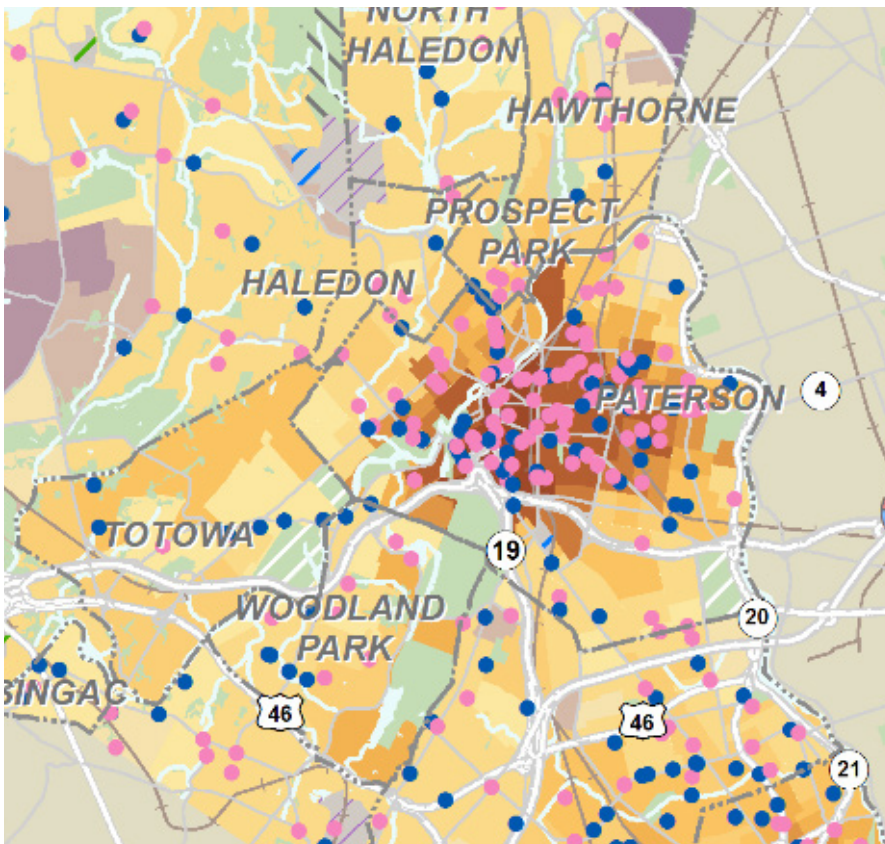
REINVESTMENT
FUND



Estimating the Supply of and Demand for Early Childhood Education in Passaic County, NJ

Prepared by **REINVESTMENT FUND**

Published **MARCH 2017**



RESEARCH CONDUCTED BY

Policy Solutions at Reinvestment Fund

Bill Schrecker, Research Analyst

Rhea Acuña, Research Analyst

Ira Goldstein, President

Introduction

High-quality early childhood education (ECE) supports positive child development and helps prepare children for success in school and beyond. Quality ECE is also critical for families, as it allows parents to maintain employment. In 2016, Reinvestment Fund conducted a study of the supply of and demand for ECE in Passaic County, NJ. Adapting a methodology developed for a 2014 study of child care in Philadelphia, the study results for Passaic County, NJ suggest that over half of all ECE (57%) is provided in state licensed childcare centers, and 27% is provided in high-quality centers (i.e., centers with National Association for the Education of Youth Children (NAEYC) accreditation, within a Head Start Program, or operated by a Passaic County public school district).

With support from the Nicholson Foundation and Taub Foundation, Reinvestment Fund created an interactive web-based tool to present the results of this analysis, accessible at www.passaiccountychildcaremap.org. This tool shows the supply of and demand for ECE and identifies where gaps in total and high-quality ECE exist throughout the county. With this information, funders, practitioners, and ECE advocates can make data-informed decisions about where resources and interventions are needed most. In Philadelphia, similar analyses informed the creation of a Fund for Quality, which provides funding support to create high-quality ECE options in underserved areas. To date, Fund for Quality financing has contributed to the creation of more than 780 high-quality seats in communities across Philadelphia where the analysis identified substantial gaps (Visit www.fundforquality.org for more information).

Main Findings

1. **A substantial gap exists between the total supply of and demand for ECE.** Across Passaic County the supply of ECE is sufficient to meet an estimated 72.0% of demand. Supply and demand are largely concentrated in the more populous areas of Passaic County - about three-quarters of all supply and demand is located in Clifton, Passaic City, and Paterson.
2. **Predominantly Hispanic communities and areas with high poverty levels have some of the most severe relative shortages in supply in the county.** Middle-income areas and predominantly African American neighborhoods have a relatively similar level of ECE supply as other areas in the county.
3. **Relative shortages in high-quality supply** generally align with expected levels across communities with different income levels, and across different racial and ethnic groups.
4. **The shortage of high-quality supply** is most severe in areas surrounding Paterson. These areas have relatively lower population density than Paterson, and are home to predominantly White and higher income populations.
5. **Shortages in licensed supply are most severe for infants and toddlers (ages 0-2).**¹ In Passaic County, infants and toddlers (ages 0-2) represent roughly 60% of the overall 0-4 population. Of the approximately 13,400 seats licensed by the New Jersey Department of Children and Families, only 2,100 (16%) are available for infants and toddlers.

¹ Infant and toddler licensed supply data are provided by Advocates for Children of New Jersey (ACNJ), based on a survey of licensed providers in August 2016. ACNJ's response data may differ slightly from surveys collected by 4Cs of Passaic County, which also gathered data from licensed providers in 2016. When there are discrepancies between ACNJ and 4Cs capacity estimates, ACNJ's estimates for infants and toddlers are used since 4Cs capacity data did not distinguish child ages under 5.

Data Collection

There is no single data source to adequately model the supply and quality of ECE —nor is there a single data source that represents demand for services. Estimates provided in this report are drawn from the following datasets:

Table 1: Sources to Estimate Supply and Demand

Sources for Estimating Supply	Sources for Estimating Demand
<ul style="list-style-type: none">▪ NJ Department of Children & Families▪ NJ Department of Education▪ Paterson School District▪ Head Start▪ National Association for the Education of Young Children (NAEYC)▪ National Establishment Time Series▪ InfoUSA▪ 4Cs of Passaic County▪ Advocates for Children of New Jersey (ACNJ)	<ul style="list-style-type: none">▪ Longitudinal Employer-Household Dynamics, US Census▪ American Community Survey, US Census▪ The Nielsen Company

After combining the datasets listed above, Reinvestment Fund statistically estimated the supply and demand of ECE in Passaic County and identified areas where gaps exist.² An advisory group of local early childhood experts vetted the reliability of data sources as well as the results of statistical estimates to accurately represent the landscape in Passaic County.

Advisory group members included representatives from the following organizations and institutions: 4CS of Passaic County, Center for Family Resources, Children’s Day Nursery, Clifton Public Schools, CUMAC, Gilmore Memorial Preschool, Greater Bergen Community Action/Head Start, Grow NJ Kids, Memorial Day Nursery, New Destiny Family Success Center, Nicholson Foundation, New Jersey Community Development Corporation, Partnership for Maternal and Child Health, Passaic Head Start, Passaic Public Schools, Paterson Alliance, Paterson Education Fund, Paterson Habitat for Humanity, Paterson Housing Authority, Paterson Public Library, Paterson Public Schools, Passaic County Community College, Read to Know, St. Joseph’s Hospital, Taub Foundation, United Way of Passaic County, and William Paterson University.

Grow NJ Kids, a statewide quality rating system (QRIS) for early childhood education providers, was recently launched in New Jersey and is in the process of a multi-year implementation. To date, few centers and homes have been rated. Given the limited number of rated programs, the advisory group suggested that Reinvestment Fund categorize ECE centers as “high quality” if they have NAEYC accreditation, operate as a Head Start program, or are operated by a public school (i.e., Abbott) district.³

² For more detail, see the methodology section of this report at www.4cspassaic.org/.

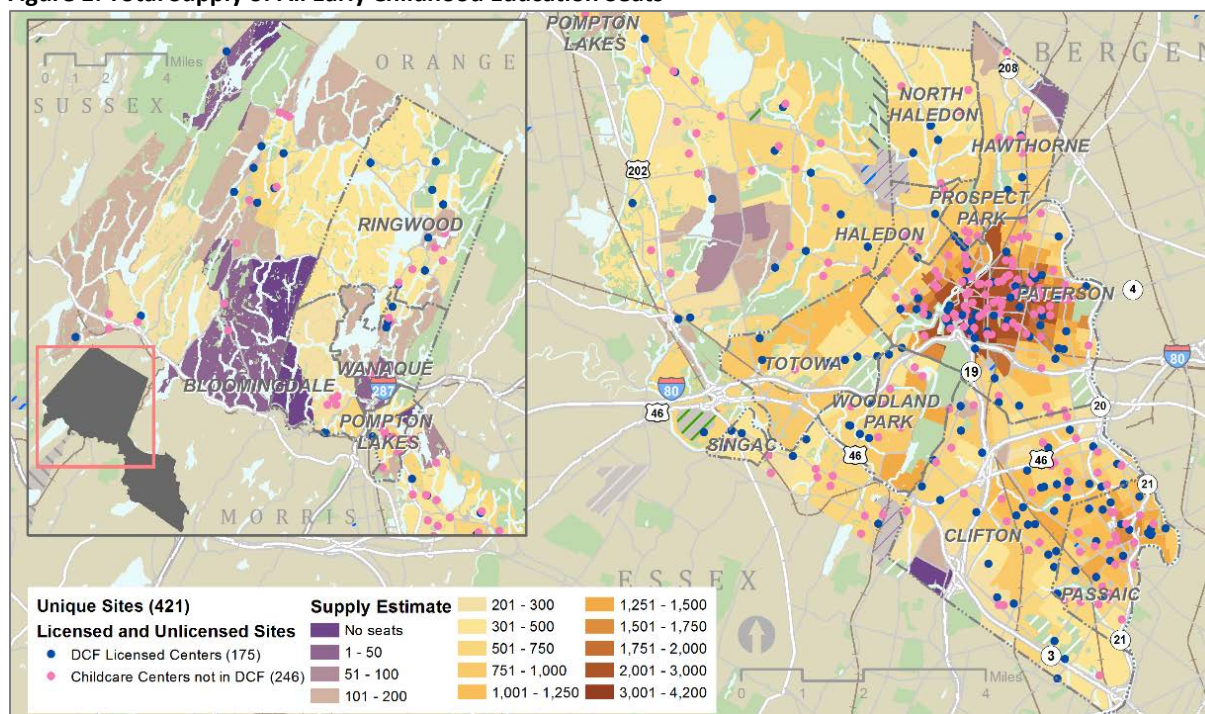
³ The New Jersey Supreme Court ruled in 1985 that all three and four year olds in Abbott school districts (i.e. economically disadvantaged districts) are entitled to full-day preschool programs. The NJ Department of Education and Department of Human Services administer the Abbott Preschool Program, and ensure that the programs follow quality standards outlined by the Supreme Court, including certified teachers, class size limits, adequate facilities, and appropriate curriculum.

Locating and Estimating the Supply of Early Childhood Education

Across Passaic County, Reinvestment Fund estimated the total supply of early care at nearly 23,600 seats. Of those, roughly 13,400 seats (57%) were licensed with the state, while the remaining 43% (10,200 seats) were unlicensed.⁴ Of the approximately 23,600 ECE seats countywide, only an estimated 6,400 (27%) were rated as high quality. These estimates represent the maximum potential supply of ECE seats, if every center were enrolled at full capacity. Importantly, **supply**, based on licensed capacity and **enrollment** are not the same. For example, a provider with a licensed capacity of 100 children, may not necessarily serve 100 students. Based on a survey of local providers, ECE centers often have fewer children enrolled than their licenses allow.

Overall, the greatest supply of ECE is found in areas with higher population densities, including downtown Paterson, Passaic, and Clifton. A large share of both licensed and unlicensed providers are located in these cities (see Figure 1).

Figure 1: Total Supply of All Early Childhood Education Seats



⁴ The non-licensed population includes informal care and license-exempt programs that are not required to be licensed by the state, such as programs operated by private schools or religious organizations.

Estimating the Demand for Early Childhood Education

There were an estimated 34,550 children under the age of five who lived in Passaic County in 2016.⁵ Using this baseline, the overall demand for ECE is adjusted to account for where people live and work, as well as household size, income, and family composition to account for family travel patterns that may affect demand for early care.⁶ These adjustments suggest that 7,200 children travel with adults to ECE providers located outside of Passaic County, near a parent's place of work. In addition, an estimated 5,410 children who reside outside the county, travel with parents to work locations inside the county and utilize providers located within the county. These adjustments yield a maximum potential demand for 32,760 ECE seats in Passaic County.⁷

The demand for ECE was greatest in areas with higher concentrations of family poverty, and lowest in areas where fewer than 10% of families were in poverty (see Table 2). In addition, areas with sizable African American or Hispanic populations also have higher levels of demand for ECE.

Table 2: Distribution of Demand for Early Childhood Education by Family Poverty, Race, and Ethnicity

	Very Low Demand	Low Demand	Moderate Demand	High Demand	Very High Demand	Total
<10% Family Poverty	18%	32%	42%	9%	0%	100%
10-20% Family Poverty	4%	8%	58%	25%	6%	100%
20-40% Family Poverty	0%	5%	35%	36%	24%	100%
>40% Family Poverty	0%	3%	12%	39%	45%	100%
<25% Hispanic	22%	41%	32%	4%	2%	100%
25-50% Hispanic	0%	4%	69%	22%	4%	100%
50-75% Hispanic	0%	1%	45%	39%	14%	100%
>75% Hispanic	0%	0%	11%	46%	43%	100%
<10% African American	15%	30%	37%	13%	5%	100%
10-25% African American	0%	1%	49%	31%	18%	100%
25-50% African American	0%	0%	31%	38%	31%	100%
>50% African American	0%	0%	45%	38%	17%	100%

How to Read this Table: Four percent of block groups where 10 to 20% of families are in poverty had very low demand for child care. Or, 45% of block groups where poverty exceeds 40% has very high demand for child care.

⁵ Nielsen county level population estimates had a 3.2% mean absolute error rate, based on 2010 estimates compared to 2010 decennial counts. Given this rate, the total 0-4 population in Passaic County likely ranges between 33,444 and 35,655. This estimation error increases to 12.0% for block group level population estimates.

⁶ Forry, N. D., Tout, K., Rothenberg, L., Sandstrom, H., Vesely, C. (2013). Child Care Decision-Making Literature Review. OPRE Brief 2013-45. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

⁷ We estimate that 33% of children of working parents in a block group will receive ECE services near their place of work. This estimate was informed by two studies, a report from the U.S. Census Bureau using the Survey of Income and Program Participation (see www.census.gov/prod/2013pubs/p70-135.pdf), and a report on the childcare arrangements of working parents in Cook County, Illinois. The methodology that moves children into and out of Passaic County for purposes of estimating demand also moves children around the county for parents who live in one part of the county but work in another.

Identifying Areas of Particular Early Childhood Education Needs

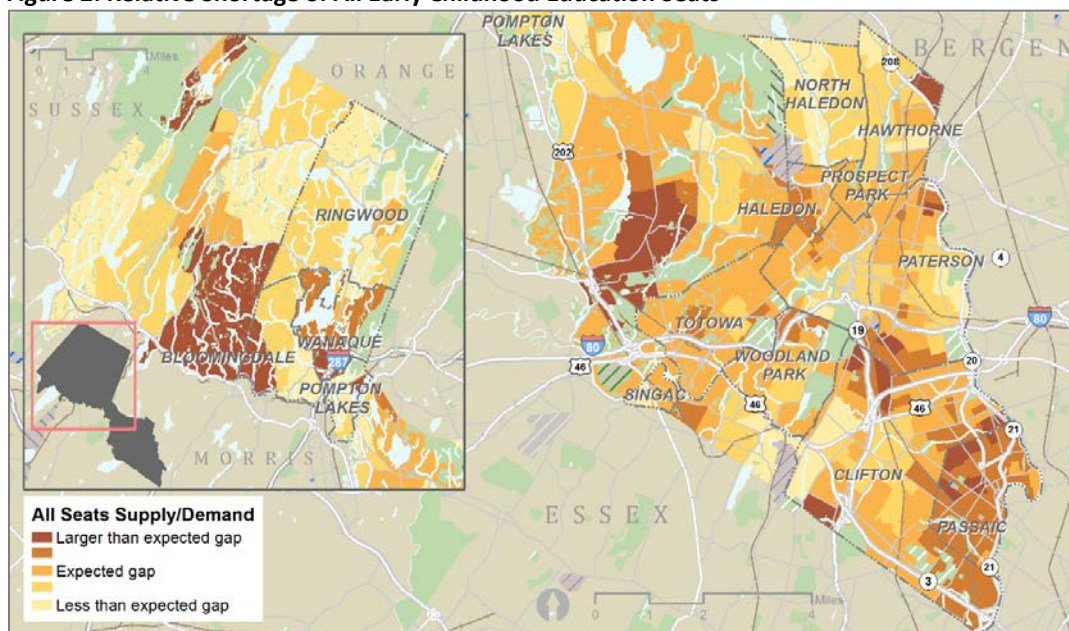
After estimating the overall supply and demand for ECE, it is possible to identify areas where shortages exist. Two types of shortage are calculated: *absolute shortage* and *relative shortage*. The absolute shortage is the raw difference between observed supply and demand. The relative shortage accounts for the observed demand in individual block groups to estimate the difference between observed supply and an expected level of supply that corresponds to observed demand. The geographic distribution of absolute and relative shortages varies across total, licensed, and high-quality early care.

Identifying supply shortages, particularly relative shortages, provides key insights for targeting programmatic or investment activity to address unmet demand in underserved areas.⁸ Figures 2, 3, and 7 (see pp. 5, 6 and 9) illustrate shortages in overall supply, high-quality supply, and licensed infant and toddler supply across Passaic County. Tables 3 and 4 (see pp. 6 and 8), and Figure 6 (see p. 8), present the distribution of ECE gaps, including high-quality gaps, for families in poverty and for different racial/ethnic groups.

Shortage in total ECE seats

- An overall demand estimate of 32,760 slots in ECE centers, combined with an overall supply estimate of 23,560, results in an absolute shortage of 9,200 slots.
- Relative shortages in total ECE seats were greatest in the city of Passaic, southern Wayne, as well as the areas along the city boundary between Paterson and Clifton (e.g., southern Paterson and northern Clifton) and parts of West Milford in the northwestern part of Passaic County (see Figure 2).
- Over half (52%) of areas where over 75% of the population are Hispanic, and 42% of areas with poverty levels above 40% had larger than expected shortages (see Table 3).

Figure 2: Relative Shortage of All Early Childhood Education Seats



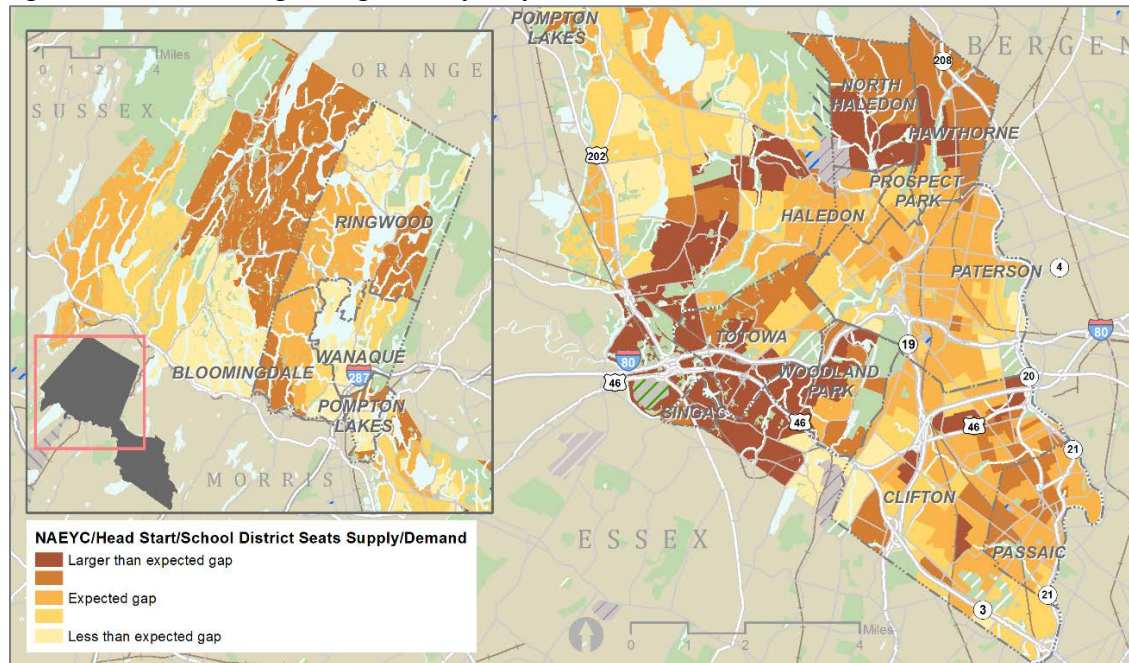
⁸ A detailed methodology to estimate gaps between supply and demand can be found in the methodological report at www.4cspassaic.org/.

Table 3: Distribution of Relative Shortages in Supply of Early Childhood Education, by Family Poverty, Race, and Ethnicity

	Much Larger than Expected Shortage	Larger than Expected Shortage	Expected Shortage	Less than Expected Shortage	Much Less than Expected Shortage	Total
<10% Family Poverty	14%	15%	36%	20%	16%	100%
10-20% Family Poverty	2%	29%	46%	19%	4%	100%
20-40% Family Poverty	6%	22%	46%	22%	4%	100%
>40% Family Poverty	12%	30%	39%	18%	0%	100%
<25% Hispanic	12%	11%	34%	23%	20%	100%
25-50% Hispanic	4%	22%	54%	15%	4%	100%
50-75% Hispanic	9%	27%	44%	19%	0%	100%
>75% Hispanic	13%	39%	30%	17%	0%	100%
<10% African American	13%	21%	35%	18%	13%	100%
10-25% African American	8%	28%	48%	14%	1%	100%
25-50% African American	4%	12%	46%	38%	0%	100%
>50% African American	0%	0%	52%	34%	14%	100%

How to Read this Table: Two percent of block groups where 10 to 20% of families are in poverty had much larger than expected shortages of child care. Or, 13% of block groups where Hispanic residents comprised 75% or more of all residents had much larger than expected shortages of child care.

Figure 3: Relative Shortage of High-Quality Early Childhood Education Seats



Shortage in high-quality seats

- The relative shortage in high-quality ECE was most severe in areas surrounding Paterson, including parts of Woodland Park, Totowa, Wayne, North Haledon, and Hawthorne, indicating that relatively few centers in those areas were NAEYC accredited, Head Start programs, or school districts sites (see Figure 3).
- The most severe shortages for high-quality ECE are located in the county's suburban and ex-urban areas with lower population density and lower family poverty rates (see Table 4).
- Abbott preschool programs are one of the largest sources of high-quality seats for 3 and 4 years old in Passaic City and Paterson. However, the total capacity of Abbott programs for the 2016-2017 school year are well below the estimated number of 3 and 4 year old children living in Passaic City (2,000 seats v. 2,800 children) and Patterson (3,800 seats v. 4,700 children) (see Figures 4 and 5).⁹

Figure 4: Abbott PreK Program's Capacity and Estimated Population of 3-4 Year Olds, Passaic City

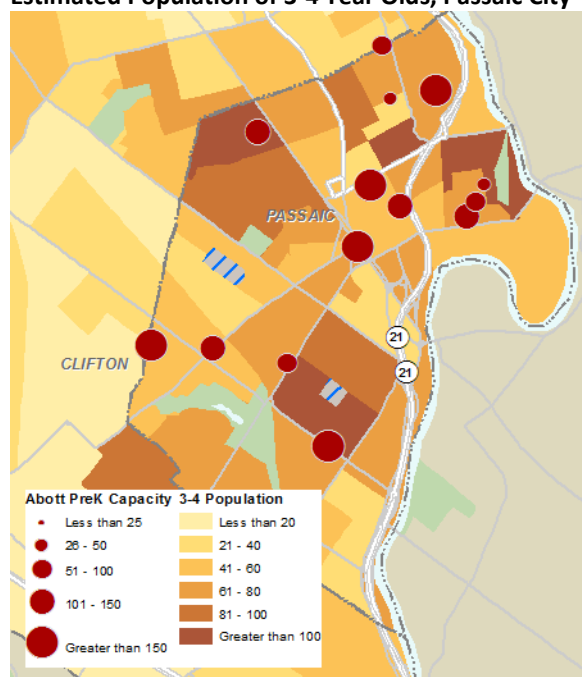
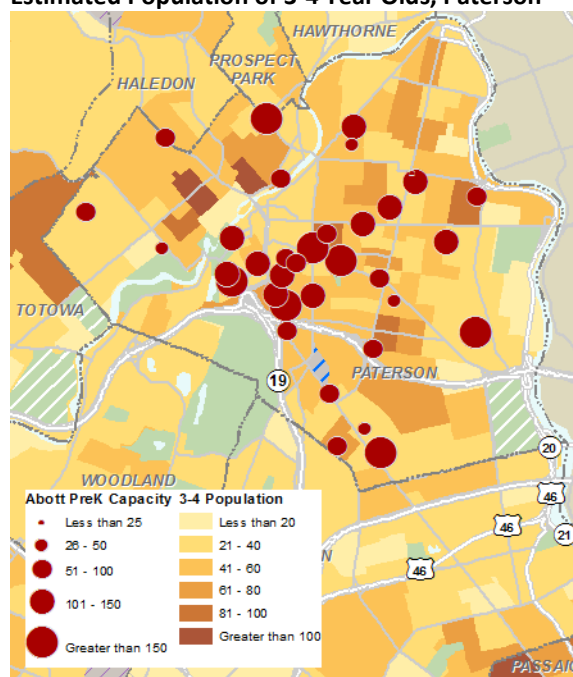


Figure 5: Abbott PreK Program's Capacity and Estimated Population of 3-4 Year Olds, Paterson



⁹ Capacity information for Abbott preschool programs in Paterson and Passaic City for the 2016-2017 school year was provided by Paterson Public Schools' Department of Early Childhood Education and Passaic Public Schools' Division of Early Childhood Education, respectively. Data was received after the completion of the study and was not part of the initial data collection, validation, and calculations.

Figure 6: Degree of Relative Shortage of High-Quality Early Childhood Education and Level of Poverty

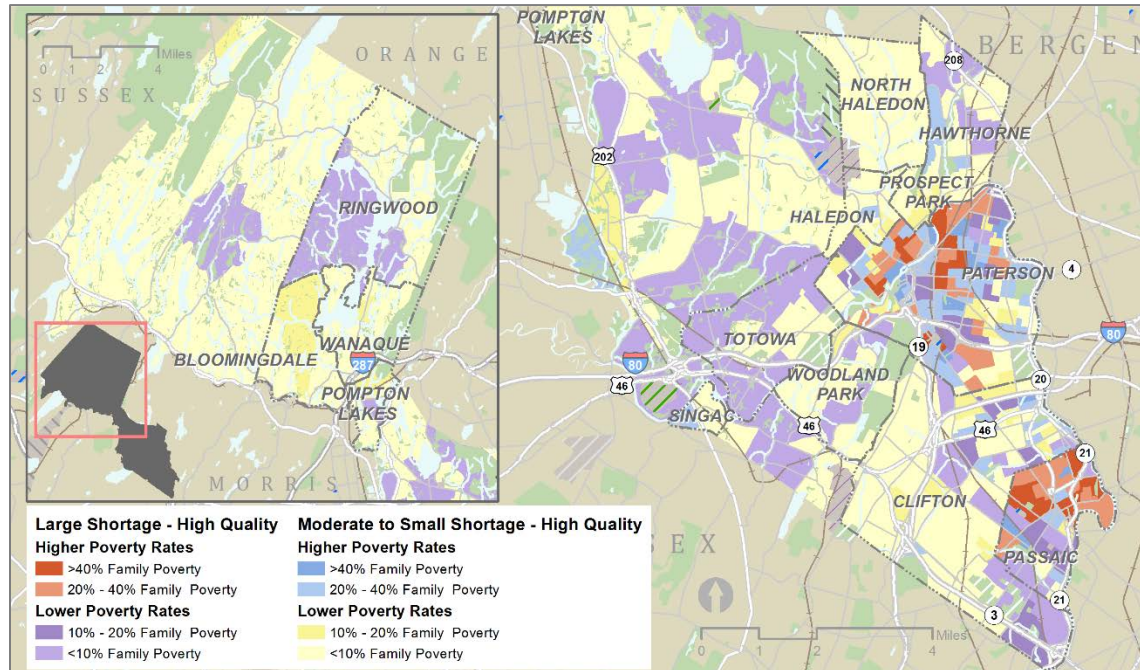


Table 4: Distribution of Shortages in Supply of High-Quality Early Childhood Education, by Family Poverty, Race, and Ethnicity

	Much Larger than Expected Shortage	Larger than Expected Shortage	Expected Shortage	Less than Expected Shortage	Much Less than Expected Shortage	Total
<10% Family Poverty	15%	25%	25%	20%	17%	100%
10-20% Family Poverty	2%	8%	54%	33%	4%	100%
20-40% Family Poverty	5%	17%	58%	18%	3%	100%
>40% Family Poverty	3%	21%	67%	9%	0%	100%
<25% Hispanic	18%	25%	18%	19%	20%	100%
25-50% Hispanic	8%	11%	53%	26%	1%	100%
50-75% Hispanic	1%	13%	64%	19%	3%	100%
>75% Hispanic	0%	28%	59%	13%	0%	100%
<10% African American	15%	24%	29%	18%	13%	100%
10-25% African American	1%	18%	44%	32%	4%	100%
25-50% African American	0%	4%	92%	4%	0%	100%
>50% African American	0%	3%	69%	21%	7%	100%

How to Read this Table: Two percent of block groups where 10 to 20% of families are in poverty had much larger than expected shortages of high-quality child care. Or, 20% of block groups where Hispanic residents comprised less than 25% of all residents had much less than expected shortages of high-quality care.

Shortage in licensed seats for infants and toddlers

- An overall demand estimate of 18,960 infants and toddlers, combined with an estimated licensed supply of infant and toddler slots of 2,130, results in an absolute shortage of 16,830 slots.
- The relative shortage in licensed seats for infants and toddlers was most severe in southern, central and northwest neighborhoods of Paterson, the southern part of the city of Passaic, as well as parts of Hawthorne, Clifton, and West Milford (see Figure 6).
- Demand for infant and toddler care accounts for about 60 percent of all demand for ECE in Passaic County, but the majority of available ECE is for children aged 3 or older. Slots for infant and toddlers only account for about 16 percent of total licensed slots countywide, and fewer than 9% of licensed slots in Patterson (see Table 5).

Table 5: Licensed Supply and Estimated Demand for Infant and Toddlers and All Early Childhood Education

	Infant and Toddlers (Aged 0 – 2)				Total (Aged 0 – 4)	
	Licensed Supply	% of all Licensed Supply	Estimated Demand	% of All Demand	Licensed Supply	Estimated Demand
Passaic County	2,130	15.8%	18,960	57.9%	13,440	32,760
Clifton	530	21.8%	3,010	60.3%	2,430	4,990
Paterson	380	8.8%	6,520	58.3%	4,310	11,190
Passaic	200	15.7%	3,890	58.4%	1,270	6,660

Figure 7: Total Supply and Demand for Licensed Infant and Toddler Early Childhood Education

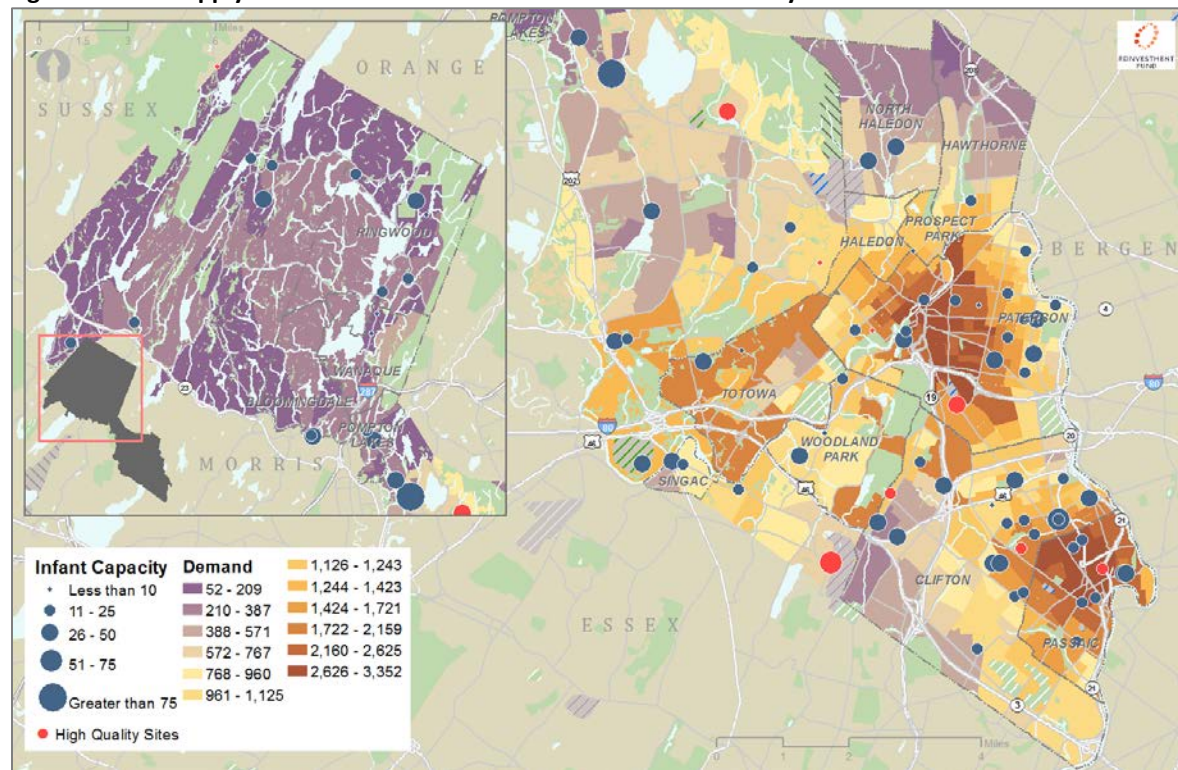
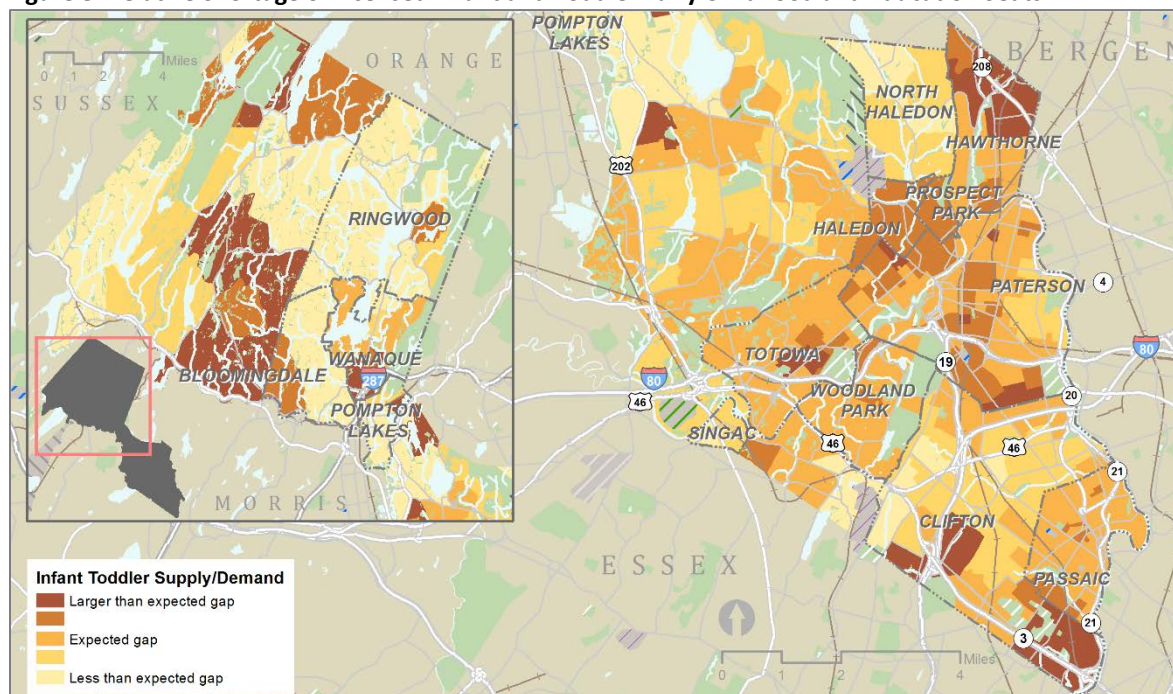


Figure 8: Relative Shortage of Licensed Infant and Toddler Early Childhood and Education Seats



Conclusions

PassaicCountyChildcareMap.org and the analyses presented in this memo represent Passaic County's first comprehensive glimpse into the availability of, and demand for, high-quality early childhood education throughout the county. The results highlight that the county as a whole faces a shortage of ECE options, but that shortages are not evenly distributed across Passaic County or across age groups. In particular, areas outside of the largest cities face an acute shortage of high-quality ECE options. Furthermore, the provision of options for infants and toddlers is scarce in many municipalities across the county, particularly in sections of Paterson, Passaic City, Clifton, and Hawthorne. These results provide a base for planners, policymakers, investors and practitioners from across the county to begin addressing these needs in an evidence-informed manner.

Reinvestment Fund has published a range of reports related to education and market impact. For details, please visit our Policy Publications site at:

WWW.REINVESTMENT.COM/IMPACT/RESEARCH-PUBLICATIONS

AUGUST 2007

Estimating the Percentage of Students Income-Eligible For Free and Reduced Price Lunch



DECEMBER 2009

School Quality and Housing Prices



AUGUST 2014

Strategic Property Code Enforcement and its Impacts on Surrounding Markets



MAY 2016

Estimating Changes in the Supply and Demand for Child Care in Philadelphia



**REINVESTMENT
FUND**

www.reinvestment.com
www.policymap.com

REINVESTMENT FUND is a catalyst for change in low-income communities. We integrate data, policy and strategic investments to improve the quality of life in low-income neighborhoods.

PHILADELPHIA

1700 Market Street, 19th floor
Philadelphia, PA 19103
TEL 215.574.5800 FAX 215.574.5900

BALTIMORE

1707 North Charles Street, Suite 200B
Baltimore, MD 21201
TEL 410.783.1110



real estate



early
education



healthcare



healthy
food



housing



k-12
education



data &
analysis



clean
energy

Reinvestment Fund is an equal opportunity provider.