Community Profile on Norwalk, CT's Young Children: Poverty Rates, Well-being, and School Readiness

UNIVERSITY OF HARTFORD

CENTER FOR SOCIAL RESEARCH
STRENGTHENING COMMUNITIES THROUGH RESEARCH

Community Profile on Norwalk, CT's Young Children: Poverty Rates, Well-being, and School Readiness

by

Marcia Hughes, PhD, Research Analyst
Center for Social Research, University of Hartford

Paula Palermo, Data Director
Norwalk ACTS

Hollie Galeano, ASQ Community Liaison
Family and Children's Agency

Mary Oster, Early Childhood Coordinator
City of Norwalk

Stephanie Adamowicz, Psy.D Candidate
University of Hartford

with assistance from
The Child Development Infoline (CDI)/Norwalk Early Childhood Initiative's Continuous Quality Improvement Team

Prepared for the Grossman Family Foundation

October 2019

Table of Contents

Table of Contents (cont.)

Overview

Purpose

Socioeconomic status is one of the biggest predictors of children's well-being and readiness for school. In this report we map and examine Norwalk neighborhood rates of childhood poverty and related family and household indicators. The analysis provides a lens for understanding how social problems underlying disparities in child well-being are beyond the ability of individual families to overcome on their own. Using relevant research, we highlight the multiple factors that place children living in poverty or at low income at risk for poor outcomes.

While the data show disparities, it also points the direction (or complements efforts already underway) for needed intervention, and related programmatic and policy development. By identifying specific neighborhoods where the most vulnerable families and their young children reside, we are able to be more strategic in 1) improving outreach, 2) better organizing delivery of services, and 3) evaluating our progress over time. With these objectives in mind, we also map available health and support services for Norwalk's young children including prenatal, birth and pediatric care services, parent and family support programs, home visiting services, and early childhood care and education programs. Using available data and other information, we highlight where Norwalk is doing well in terms of resources and reach to families with young children, and give direction on where we should focus our attention, services and resources to better support families and promote child development as early as possible.

The profile itself is a tool for promoting direct analysis of the data by stakeholder groups including city leaders, early childhood professionals, educators, and advocates. To be effective, the data must be updated to reflect change over time.

Methods and Data Analysis

In this report, we use available data from different primary and secondary sources to draw attention to, and create a unified view of, underlying themes. We also integrate relevant research to further "fill out the story," interpret the data, and understand some of the implications of key findings.

Unless otherwise noted, the majority of the neighborhood-level data were obtained from the US Census Bureau's American Community Survey (ACS) 5-Year estimates, 2013-2017. Unlike the 10-year census, the ACS survey continues all year, every year, and is completed by a sample of randomly selected households over time. Although estimates produced from sample surveys (rather than the full population) always have uncertainty associated with them, the 5-year estimates are based on 60 months of collected data. This increases the statistical reliability, in particular for less populated areas and small population subgroups (i.e., census tracts or neighborhood-level data) (United States Census Bureau, 2018).

In addition, we include secondary data and information from other publicly available sources: Connecticut Department of Public Health, Connecticut Office of Early Childhood, City of Norwalk, United Way of Connecticut's 2-1-1, and the Norwalk Public School System.

We also held forums to gather input from early childhood stakeholders involved in Norwalk's Early Childhood Initiative, a state-local partnership. Core collaborators included Norwalk ACTS Cradle to Career Partnership, Family & Children's Agency, Mid-Fairfield Child Guidance Center, All Our Kin, Norwalk Health Department (NHD), Norwalk Early Childhood Office, Norwalk Public Schools, Connecticut's Child Development Infoline (CDI), and the University of Hartford's Center for Social Research.

The framework and focus for honing in on the characteristics, needs, and strengths of Norwalk's communities, families, and programs were guided by:

- The "Community Profile" tool (Sorenson Impact, University of Utah, Eccles School of Business, 2018)
- Community Mapping Discussion Guide for Birth Through 8 Stakeholders (National Academics of Sciences, Engineering, and Medicine, 2015).
- Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation (Allen & Kelly, National Research Council, Engineering, and Medicine, 2015)

Summary of Findings and Implications

Child Poverty Rates, Family and Household Indicators, and Related Research

Children as a group are overrepresented among the poor. Young children, in particular, are the most vulnerable. Nationally, 45 percent of children under six years are living at or below poverty or at low income as compared to 41 percent of children six to 17 year olds (Jiang, Granja, & Koball, 2017). Compared to the US rate, the rate of young children who are deeply poor, poor, or near poor is significantly lower in Connecticut (31%) and in Norwalk (36%). However, tract-level census estimates presented in this report show a wide range in child poverty rates across Norwalk neighborhoods from as low as zero percent in Rowayton, to 14 percent in Marvin Beach, 44 percent in West Main, 70 percent in Hospital Hill, and finally a startling 85 percent in Norwalk Center.

Eight neighborhoods in Norwalk out of 22 form a centralized area with concentrated poverty among children under six years, ranging from 51 to 85 percent. Compared with the surrounding neighborhoods, these neighborhoods also have very low median income and adult education levels, and very high rates of renter-occupied housing, unemployment, single mother households, and low English speaking households. In addition, the majority of Norwalk residents who are Black, multiple race, and/or of Hispanic ethnicity reside in this centralized area of concentrated poverty. Similar to the US trends, the majority of young children who reside in poor and low income family households in Norwalk are disproportionately Black and Hispanic.

Poverty rates among young children are more indicative of well-being than any other indicator. On average, families need an income equal to about two times the federal poverty level (FPL) to meet basic needs. Families with incomes between 100-199 percent of the FPL are defined as "low income" or "near poor." Families who are below 100 percent of the FPL are defined as "poor," and within poor households, families below 50 percent of the FPL are defined as "deeply poor." ***In Norwalk there are an estimated 184 children who are deeply poor, 508 children who are poor, and 1,530 children who are near poor. To a greater or lesser extent, the families of these children do not have the means to meet their basic needs. This includes such things as housing, health care, food, child care, and diapers.*** Severity of poverty (deeply poor, poor, or near poor), length of time living in poverty (i.e., "ever" poor versus persistently poor), and being poor in a poor neighborhood (referred to as "double jeopardy"), all have differential effects on child outcomes (Ekono et al., 2016).

Data on Newborns and Related Research

In 2015, there was a total of 1,151 births in Norwalk: 509 were born to White non-Hispanic mothers, 394 were born to Hispanic mothers (of any race), 136 were born to Black non-Hispanic mothers, and 110 were born to non-Hispanic mothers of other races. The racial/ethnic groups with the highest rates of late, or no prenatal care were Black non-Hispanic (20.6%) and Hispanic (22.6%) mothers. These rates are much higher than both the state (11.7%) and city percentages (13.7%). Black non-Hispanic mothers also had the highest rate of low birth weight (16.9%), much higher than rates in Norwalk (7.9%) and in Connecticut (9.5%).

Out of the 394 births born to Hispanic mothers, 80 percent (n=314), were born to foreign-born mothers. A similarly high percentage, 77 percent (n=85), of the 110 births born to non-Hispanic mothers whose race was other than White or Black were foreign-born. Given findings from metro-level analyses on unauthorized residents in the Bridgeport-Stamford-Norwalk metro area (The Pew Research Center, 2019), it is likely that a subgroup of these children are born to mothers who are undocumented immigrants, a potentially isolating factor for families and their young children.

A child's birth circumstances have a large effect on his or her chances in life. The brain circuitry of a

young child, from birth to 3 years of age (and even prenatally), is especially responsive to environmental experience. Because of early neural plasticity, the brain changes in anatomy and function in response to external stimulation. Specifically, the interactions between the way a child is nurtured (i.e., environment) with a child's nature (i.e., genes) on the developing brain can lead to any number of capacities in such important areas as stress reactivity and coping, focused attention, memory, language development, and immune functioning.

Multiple Risk Factors for Young Children Living In Poverty or At Low Income

Living in a poor or low-income household as a young child has a large effect on their chances in life due to some or all of the below listed risk factors .

- Being born premature or at low birth weight (i.e., due to the effects poverty has on maternal health), is associated with: serious health problems for babies; learning and behavior problems throughout childhood; poor educational and economic outcomes; and long-lasting financial costs.
- Families who are living in deeply poor, poor, or near poor households do not have the financial means to meet their basic needs (such as food, housing, and transportation).
- Low parent educational level (associated with the likelihood of children experiencing poverty) is also associated with the child's academic achievement. The relationship between parent educational level and child academic achievement persists even after taking into account level of poverty (i.e., for children at the same level of poverty, parent academic level makes a difference).
- Even young children are aware of the stigma of being poor, and the resulting fear and anxiety can be isolating, which leads to other poor outcomes.
- Often a component of being poor is housing instability; if a child experiences even one residential move that occurs for a negative reason, it is associated with poor academic outcomes; with each additional move, there is more impact.
- Poor and low income families are less likely to have access to well-funded, high quality child care programs or have the time or resources to participate in organized learning activities.
- The direct experience of chronic poverty-related material deprivation and related stress affects early brain development (i.e., "toxic stress"), impacting children's long-term response to stress and how they regulate themselves.
- Economic insecurity due to limited resources takes a toll on parents' energy, patience and sense of control, which undermine their ability to focus on their child's needs.
- Maternal depression among low income mothers is as high as 30 to 50 percent. The effects of maternal depression on children's short and long term well-being, across a wide range of health and behavioral indicators, is recognized as a public health issue. The effects of unavailable and insensitive parenting associated with maternal depression are more problematic and more durable the earlier it occurs in a child's life, the more severe the episode, and if there are multiple episodes. But even low levels of maternal depression (i.e., subthreshold) have been associated with poor child outcomes.
- While young children in general are at risk for child maltreatment (as compared to older children), there is increased likelihood for children in poverty to be exposed to a traumatic event such as abuse, or exposure to domestic violence.
- Not only is maltreatment among young children routinely unrecognized, but traumatized children are often further mistreated by being labeled as a 'behavior problem" in childcare or school settings.

Public Assistance, Service Programs, and Supports for Families

Parents, family members and community members (i.e., primary care, childcare, educational, and social service providers), and the ways in which they interact, all contribute to the state of a young child's well-being. In order to optimize a child's development, and identify any problems early, adult care and sup-

port across home, child care, primary health care, and other service settings should be consistent and cumulative at each developmental time point (i.e., at 3 mo., 6 mo., 12 mo., etc), and from one developmental context to the next (from early childhood care to preschool, to kindergarten).

Government programs that provide a safety net for families (e.g., cash benefits, supplemental food, housing assistance), have positive effects on children's health and development. For example, in Norwalk, Norwalk Center has the highest percentage of children under 6 years who are living at or below poverty or low income (85%) and also has the highest percentage of children under 6 years receiving public health insurance (72.4%). The majority of young children in East Norwalk, Spring Hill, Woodward, and Golden Hill, additional neighborhoods with very high rates of young children living at, below or near poverty, are also receiving public health insurance (ranging from 51% to 66%). However, families and even early childhood providers report that the process of applying for benefits is often lengthy, with inflexible rules that can be very confusing. Once obtained, subsides are often insufficient and/or are withdrawn once a family makes a certain income, creating instability.

While the entry point to needed services for children and families ideally begins prenatally (Robbins et al., 2014), more times than not, early identification of child and family needs happen as challenges come up or after serious problems have occurred. For example, while a family is at a pediatric visit, through a referral to a home visiting program, when a child enters preschool or kindergarten, or when they come to the attention of the child protective system.

Given that families and parents are not always experts in child development, there are many types of agencies and programs to assist families (Updegrove et al., 2017). Similar to the state's service systems (Noonan et al., 2017), Norwalk's support and reach to young children and their families is a mixed-delivery model, a combination of public and private community-based providers and funding sources.

Many high quality programs to support young children and their families exist in Norwalk; however, no one service or program is a panacea, nor are service agencies able to construct a comprehensive picture of a child as currently organized. Even though all early childhood professionals share the same objective of optimizing child development, the different service systems have their own governance, responsibilities, budgets, positions, and regulations. This often creates confusion for families and providers alike who have to navigate the different systems (Institute of Medicine and National Research Council, 2015), and makes it near impossible to gain a comprehensive understanding of the child (Harris et al., 2007).

In addition, service capacity does not meet the need. Relative to services for three and four year old children (i.e., with established preschool programs as an entry point for other services), access to services for infants and toddlers have historically been far more fragmented. For example, in Norwalk there is an estimated 1,095 infants and toddlers who are living below 200 percent FPL and presumably all are eligible for state funded childcare and/or home visiting services. However, there are only 214 infants and toddlers who are receiving subsidized early childhood care (20%), and 170 families who are receiving home visiting services (15%). The capacity (i.e., funding) does not meet the need for our youngest children, even though there is strong evidence of high return on money invested. For example, for every $1.00 invested in high quality childcare for low income children, there is a return of $7.30 in future labor income, reduced crime rates, improved education, better health, and parents' labor income (Garcia et al., 2016).

Program and Policy Development in Support of Norwalk's Youngest Children

In order for young children to be ready for school when they enter kindergarten, an important policy

strategy is investing in children and families before birth (Doyle et al., 2009). For all children and families but especially for the most vulnerable of Norwalk's children and families (i.e., deeply poor, poor, and near poor), investment and special attention are needed for the following: 1) quality prenatal and post -partum care for mothers; 2) regular maternal health/ depression screenings and child developmental screenings; 3) referral and connection to essential safety net programs and family/child health services as needed; 4) parenting education support; 5) high quality child care and education; and 6) support for parent employment and educational training.

The Child Development Infoline at United Way of Connecticut, offers families, pediatricians, and education and social service programs access to the Ages and Stages Child Monitoring Program. The Ages and Stages Questionnaire is a parent-friendly screening tool, endorsed by the American Academy of Pediatricians and effectively used cross-culturally (Squires et al., 2009). Through a series of screens, it can be used to track children's developmental progress between the ages of one month to 5.5 years.

The Child Development Infoline/Norwalk Early Childhood Initiative, a state-local partnership funded by the Grossman Family Foundation (2013-2021), has engaged health care providers, Norwalk City Office of Early Childhood, the public school system, social service providers, and families. A Continuous Quality Improvement (CQI) team has been established in developing a city-wide system for screening, tracking, and promoting young children's development, birth to kindergarten, using the Ages and Stages Questionnaire. Norwalk ACTS, working in conjunction with the Norwalk Public School and the University of Hartford, are establishing data collection protocols and mechanisms for tracking child developmental progress including linking child-level data.

The use of the Ages and stages Questionnaire (ASQ-3) in Norwalk is two-fold:

- To monitor, promote, and track development of individual children across home, healthcare, childcare and other service providers.
- As a global monitoring and assessment of all young children in Norwalk (i.e., as a population-level indicator) (Beam, et al., 2015).

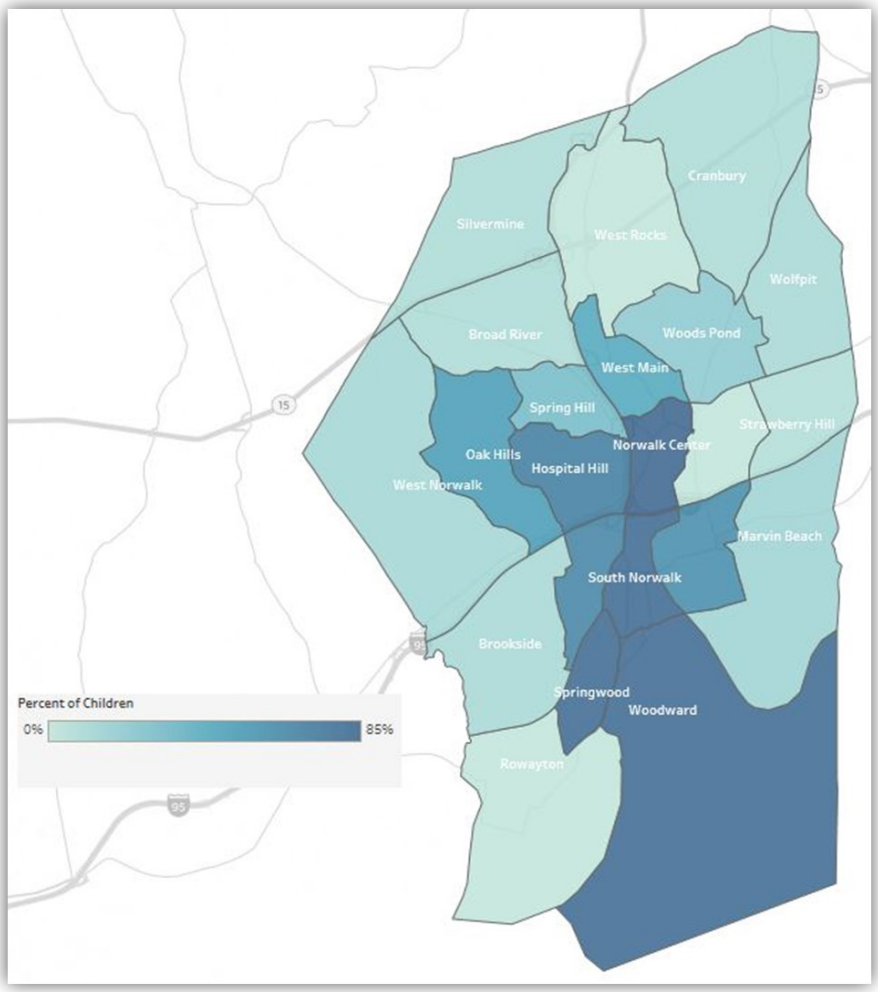
Using the ASQ-3 as a population-level indictor of child development, as well as an individual-level screen, helps guide strategic intervention and outreach at the neighborhood level. In partnership with Norwalk Public Schools, parents have been completing the ASQ-3 at preschool program enrollment and at kindergarten registration since 2017. For the children entering kindergarten in the 2019/2020 school year, the ASQ-3 data by neighborhood show a wide range in rates of children's need for developmental monitoring or evaluation. The centralized neighborhoods with highly concentrated rates of child poverty had much higher rates of children in need of further monitoring or evaluation. While for the wealthier neighborhoods, the rates of children in need of further monitoring or evaluation as measured by the ASQ-3, are much lower.

For systems to be effective, especially for the most vulnerable young children, there has been a national "call to action" to use a collaborative approach across programs that focuses on the 'whole child' rather than separate aspects of child well-being (National Opinion Research Center, 2011). Universal approaches are being promoted as a means for making a broad impact at the population level. In other parts of the US, policy strategies focused on systems of psychosocial care that provide early and ongoing universal support for all families, including for children and families at highest risk, are having positive effects on parents and babies (Haskins et al, 2019).

A confluence of local and regional developments make this the ideal time to scale this vision within Connecticut and specifically, Norwalk. The recent restructuring of Norwalk City government created a Department of Community Services to oversee the Health Department, Office of Early Childhood, Youth Services Department, Department of Human Services and Fair Housing, and Norwalk Public Library and to connect families to other existing resources in the community. This restructuring signifies an expanded, more formalized commitment by local government to lead efforts to support all families.

Figure 1. Percentage of Children Under 6 Years Within each Neighborhood Who are Living At or Below Poverty or at Low Income

US Census Bureau (2013-2017) ACS 5-year estimates, Table B17024

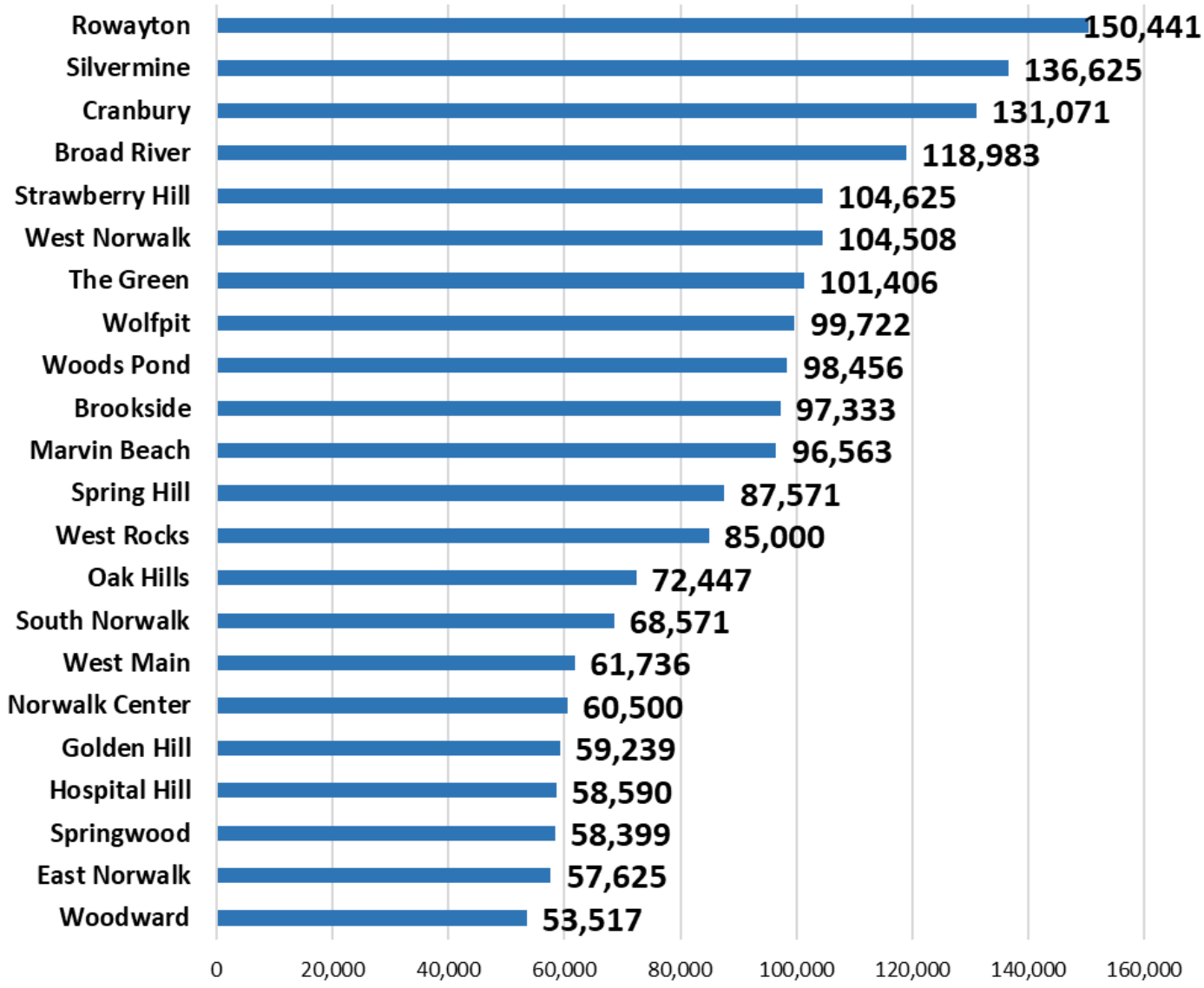


In Norwalk, there are an estimated 6,218 children under 6 years, and of these young children, 2,222 (36%, more than one-third) are living at, below or just above the Federal Poverty Level (FPL) (i.e., <200% FPL includes deeply poor, poor, and near poor). Of the 22 neighborhoods, there are eight contiguous neighborhoods in south-central Norwalk that form an area with highly concentrated rates of poverty and low income among young children: Norwalk Center (85% of children under 6 years), South Norwalk (83%), Springwood (82%), Woodward (82%), Hospital Hill (70%), Golden Hill (66%), Oak Hills (51%), and East Norwalk (62%). Just north of this area, are three more neighborhoods with high rates of young children in poverty: West Main (44%), Spring Hill (31%), and Woods Pond (21%). Out of the 2,222 young children living at poverty levels, 1,700 (76%) reside within these 11 adjacent neighborhoods. In the surrounding neighborhoods, there are relatively low numbers of children, or none at all, living at poverty levels (0-14%, 522 children in total).

Poverty rates among young children are more indicative of well-being than any other indicator. On average, families need an income equal to about two times the federal poverty level (FPL) to meet such basic needs as housing, food, health care, child care, and transportation. Households with incomes less than 199 percent of the FPL are referred to as low-income; within low-income, households between 50 to 100 percent of the FPL are referred to as poor, and those below 50 percent of the FPL are deeply poor (Jian et al., 2017). The neighborhoods in Norwalk with the highest concentration of very poor, poor, and near poor young children (<200% FPL) have the lowest median income (see Fig. 2), lower education levels (see Fig. 6), and highest rates of renter-occupied housing, unemployment, low English speaking households, and single mother households (see Figs. 9-11). When poor or low income children reside in areas of concentrated poverty (see Figs. 2 & 3), it is referred to as "double jeopardy" because of strong evidence that multiple layers of disadvantage at the neighborhood level negatively impact children's health, achievement and well-being more than any single indicator of family-level poverty (Hernandez, 2011).

Figure 2. Median Income within Each Neighborhood (2017)

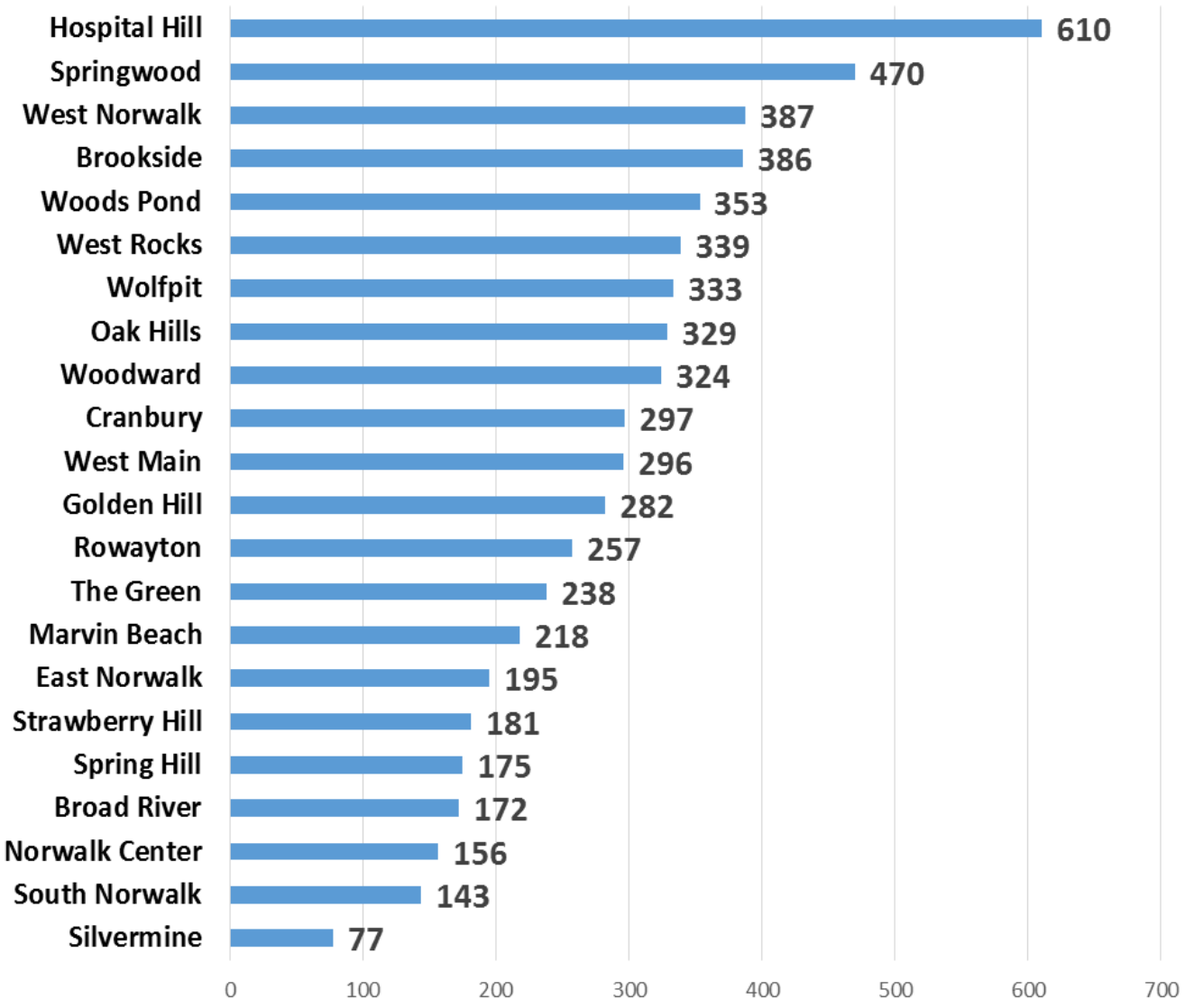
US Census Bureau (2013-2017) ACS 5-year estimates, Table S1903



Norwalk is the sixth most populous city of Connecticut with a total population of 87,930 (Greater Norwalk Region, CHNA, 2016). Fig. 2 shows median income by neighborhood (i.e., the point that divides the household income distribution into halves, one-half with income above the median and the other with income below the median). While Connecticut's median income in 2017 was $74,168 (Guzman, 2018), the median income among Norwalk neighborhoods ranged from a low of $53,517 to a high of $150,441 (nearly $100,000 difference). Not surprisingly, neighborhoods with the highest rates of children living at or below poverty or at low income are also at the low end of the median income range. As a state, Connecticut has among the nation's highest levels of income inequality. Segregated affluent and poor neighborhoods represent two extremes in Connecticut (Buchanan and Abraham, 2015). Usually there are several neighborhoods between these two extremes, and rarely do these neighborhoods border. Norwalk is one of the handful of locations in Connecticut where in fact these two extremes do border. Analysis of census data show the disparity in Norwalk at the local, neighborhood level.

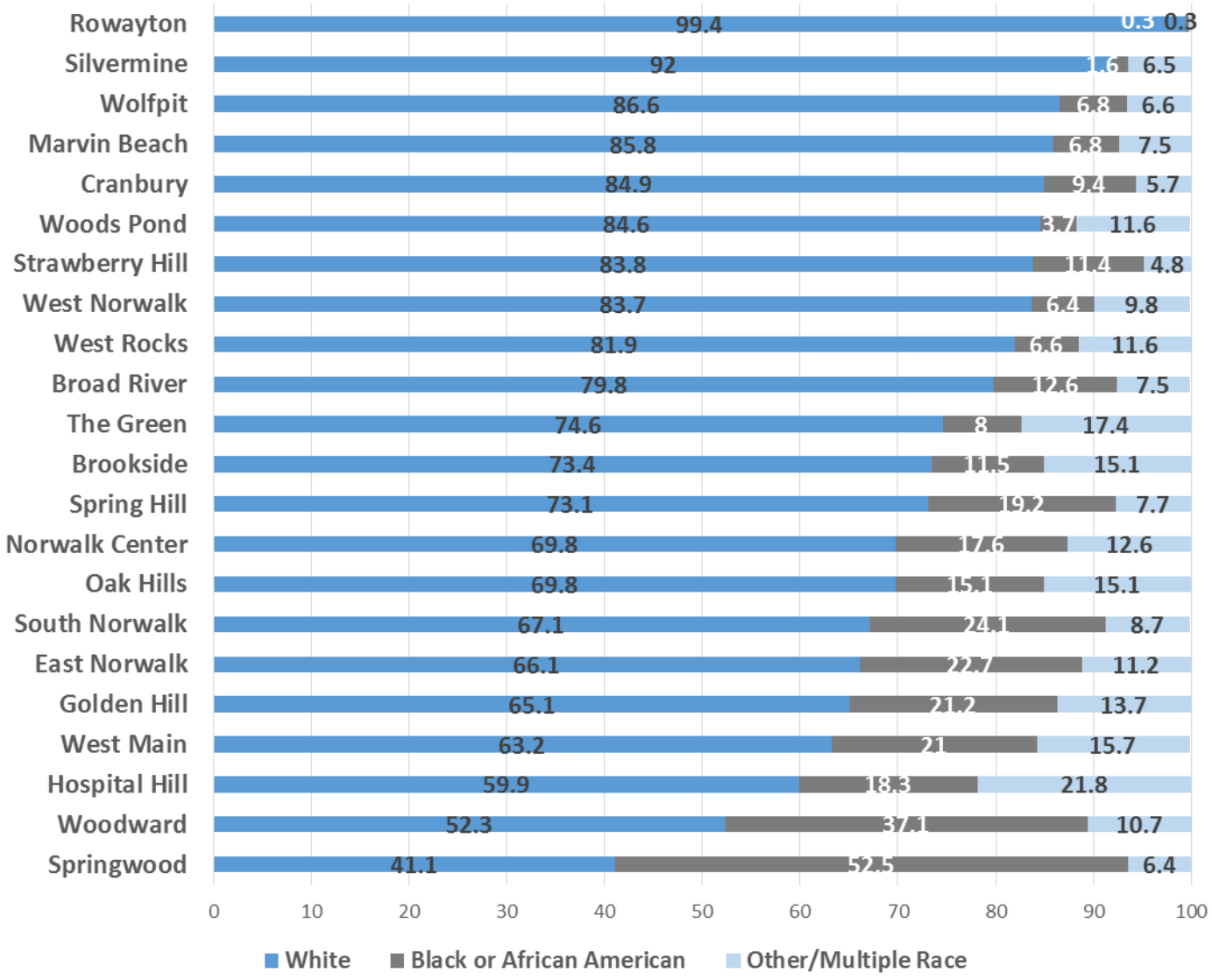
Figure 3. Number of Children Five Years and Younger in Each Neighborhood (N=6,218)

US Census Bureau (2013-2017) ACS 5-year estimates, Table B09001



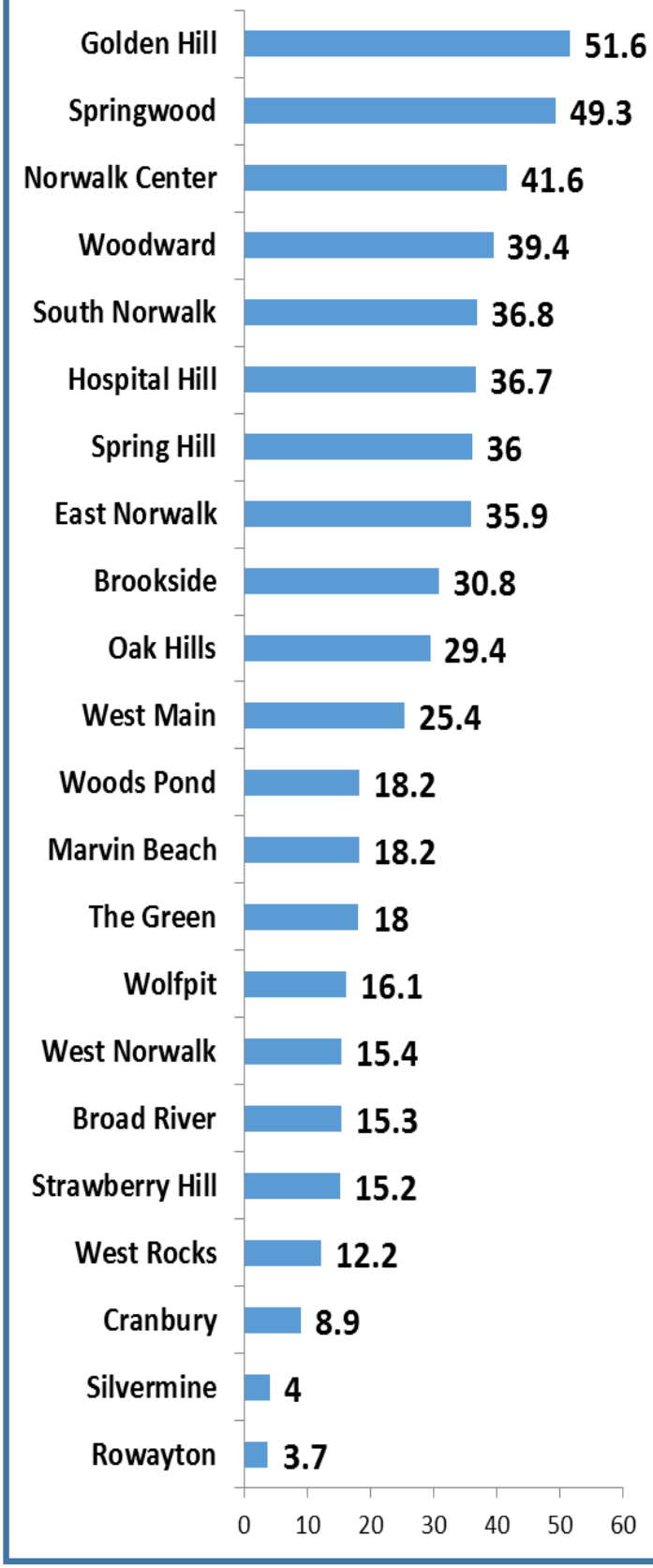
Census data show that there are a total of 6,218 children five years and younger who reside in Norwalk. A substantial number reside in each of the neighborhoods. Silvermine is the exception with less than 100 young residents (n=77). Figure 2 shows that the top two neighborhoods with the greatest number of young children are located in the centralized area with concentrated poverty: Hospital Hill has a total of 610 children, 70 percent of whom are living at <200% FPLs, and Springwood, one of the relatively smaller geographic neighborhoods, has 470 young children, with 82 percent living at <200% FPL. Overall, there are 2,509 young children living within the eight neighborhoods with the highest rates of poverty and low income (ranging from 51% to 85%), and an additional 824 children living within the neighborhoods with the next highest rates of poverty (ranging from 21% to 44%). Altogether, the number of children living in neighborhoods that place them at disadvantage (i.e., lower median income and educational achievement, and higher rates of unemployment) was 4,157 in 2017 or 67 percent of the 6,218 young children living in Norwalk.

Figure 4. Percentage Race By Neighborhood: White, Black or African American, and Other/Multiple Race *US Census Bureau (2013-2017) ACS 5-year estimates, Table DP05*



Racially concentrated areas of affluence versus racially concentrated areas of poverty: Figure 4 shows neighborhoods in order by percentage of people identifying as White, ranging from 99.4% in Rowayton to 41.1% in Springwood. While Springwood has the highest percentage of people who identify as Black/ African American (52.5%), Hospital Hill has the highest rate of people who identify as either Asian, American Indian or Alaska Native, Native Hawaiian or multiple races (i.e., Other/Multiple Race, 21.8%). The neighborhoods with the highest rates of children living at poverty or low income and lowest median income are also the neighborhoods with the highest percentage of people who are of Black or African-American race or Other/Multiple races. Several neighborhoods represent the extremes: Rowayton is a racially concentrated area of affluence - 99% White, $150,000 median income, zero children experiencing poverty, while Springwood and Woodward, both adjacent to Rowayton, are racially concentrated areas of poverty; the respective demographics in these neighborhoods are 59% and 48% Black, African-American or multiple race, $58,000 and $53,000 median income, and 82% and 83% children under 6 living at poverty or low income.

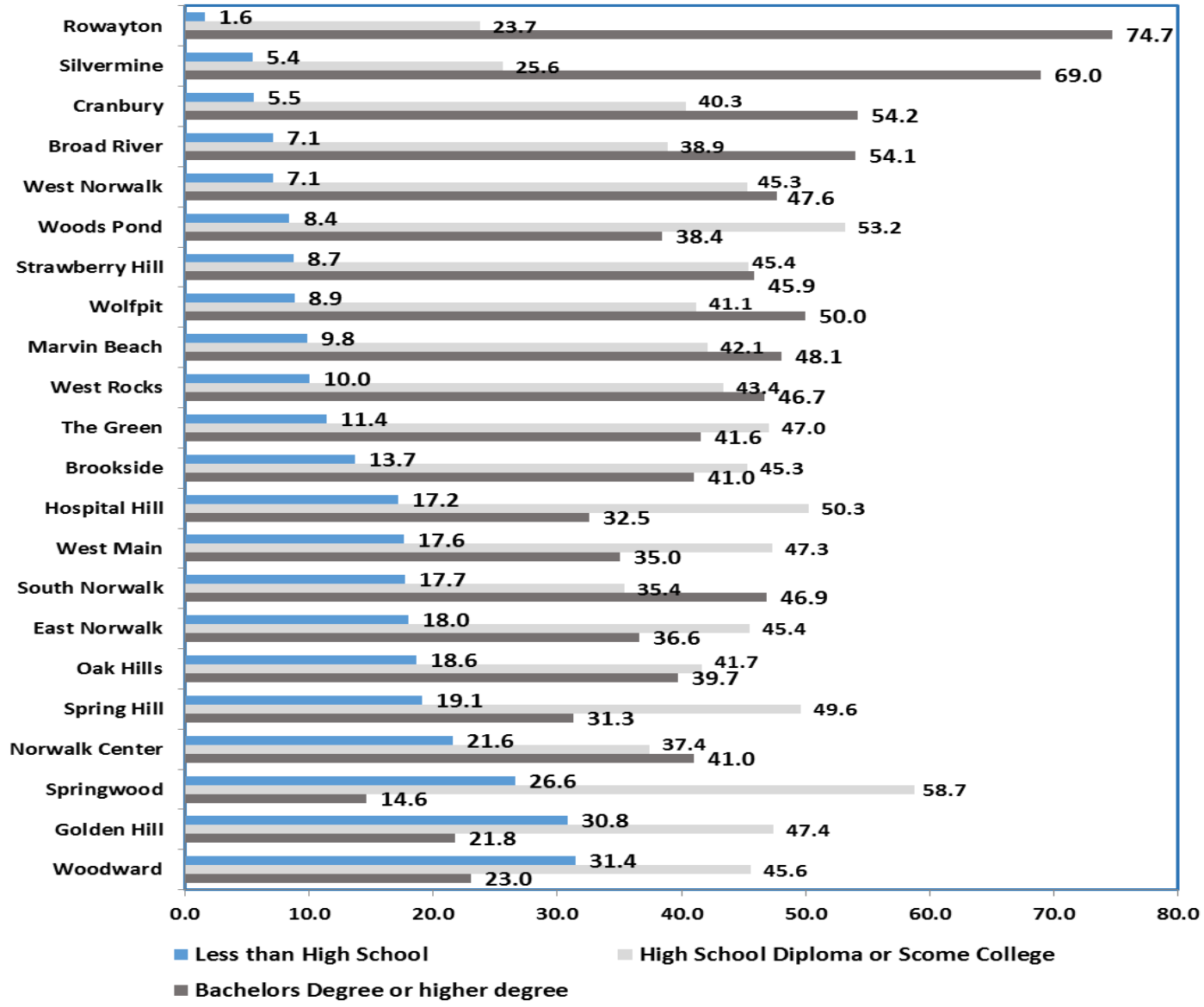
Figure 5. Percentage Hispanic or Latino Population by Neighborhood *US Census Bureau (2013-2017) ACS 5-year estimates, Table DP05*



The US Census Bureau treats Hispanic ethnicity and racial identity as distinct categories that can overlap. Using the definition provided by the U.S. Office of Management and Budget (US Census Bureau, 2018) 'Hispanic or Latino' is 'a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.' Figure 5 shows that approximately half of the populations in the Golden Hill and Springwood neighborhoods are Hispanic, approximately 40 percent of the populations in Norwalk Center and Woodward, and more than a third of the populations in South Norwalk, Hospital Hill, Spring Hill, and East Norwalk are Hispanic. These neighborhoods are also the neighborhoods with the highest rates of childhood poverty and lowest median income (see Figs. 1 & 2).

The Pew Research Center (see *Hispanic Trends*, March 2019) ranked The Bridgeport-Stamford-Norwalk metro area (i.e., Fairfield County) 28 out of 182 metros across the United States for total number of unauthorized residents (i.e., people who either crossed the border illegally or overstayed their visas). ***The estimated number of unauthorized individuals in the Bridgeport-Stamford-Norwalk metro (70,000 individuals as of 2016) accounts for 7.1 percent of the metro population (a rank of 13 out of the 182 metros that were listed), and 31 percent of foreign born individuals.*** At a national level, The Migration Policy Institute (2015) estimates that 31 percent of unauthorized individuals, 15 years or older, are parents of US citizens. Although we do not have neighborhood level data for Norwalk, based on the metro and national trends, as well as the experiences of early childhood providers working with families in Norwalk communities, a sizable subgroup of babies born into families with parents who are likely unauthorized residents of the United States (see also Fig. 22).

Figure 6. Percentage of Adults (25 Years or Older) by Neighborhood with: Less than High School Degree, High School Diploma or Some College, or Bachelors or Higher Degree *US Census Bureau (2013-2017) ACS 5-year estimates, S1501*



Parent education at child's birth is related to child's academic achievement, even after taking into account childhood poverty. Fig. 6 shows that the percentage of adults within each neighborhood (25 years or older) who have less than a high school (HS) degree ranges from 1.6 to 31.4 percent, and increases within neighborhoods that have higher rates of poverty and lower median income (see Figs. 1 & 2). Research shows that on average there is lower educational attainment among children with less educated parents (Ratcliffe, 2015). The relationship between parent educational level and child academic achievement persists even after taking into account childhood poverty. Specifically, children who live at poverty for at least one year (i.e., "ever-poor" children) whose parents have a HS education are 60 percent more likely to obtain some post-HS education compared to ever-poor children whose parents do not complete HS; additionally, for ever-poor children whose parents have *more than* a HS degree, they are twice as likely to attend postsecondary education and nearly five times more likely to graduate from college (Ratcliffe, 2015).

Figure 7. Percentage Renter-Occupied Housing Units by Neighborhood *US Census Bureau (2013-2017) ACS estimates, Table B25003*

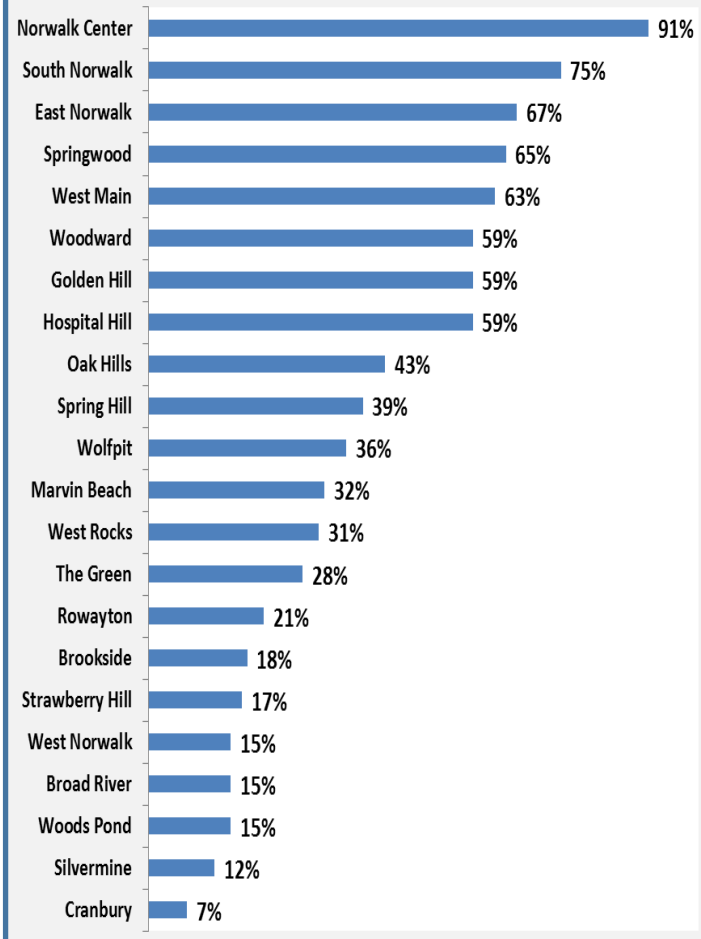


Figure 8. Total Number of Public Housing Units by Neighborhood *(Assisted Housing: National and Local, HUD User, 2018, Based on 2010 Census)*

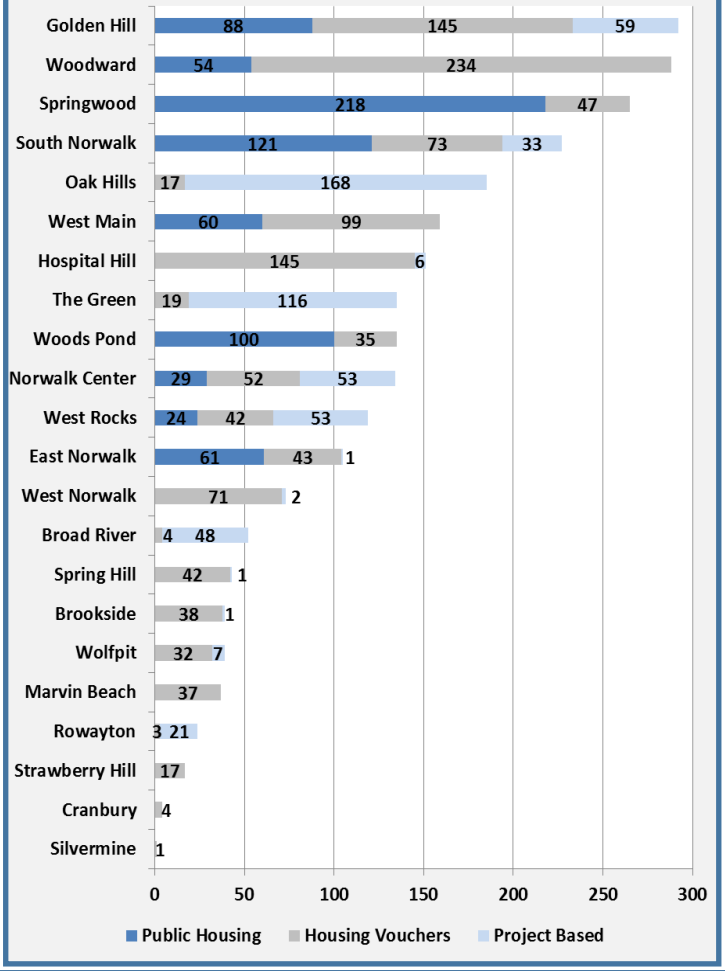


Figure 7 shows very high rates of renter-occupied homes in Norwalk's poorest neighborhoods. The rates, ranging from 59% in Hospital Hill to 91% in Norwalk Center, are indicative of neighborhood instability. ***Ever-poor children who move once compared to ever-poor children who never move are worse off educationally, and with each additional move, the negative effects increase (Ratcliffe, 2015).***

There are three categories of housing assistance under the U.S. Department of Housing and Urban Development (HUD) (Housing Act of 1937): public housing, housing vouchers, and project-based (Office of Policy Development and Research, n.d.). ***Public housing*** is housing owned by a local housing agency; eligible households receive subsidies only if they live at the housing project. For ***housing vouchers*** (created as a Section 8 Certificate in 1974 and replaced by the Voucher Program in 1998), a local public housing agency (PHA) operates as the administer who then enters into contracts with private landlords. Assisted households can take the subsidy with them if they move. ***Project-based*** housing (multifamily assisted, privately-owned) is a collection of programs created during the last four decades under which rental housing is owned by private landlords who enter into contracts with HUD to receive housing subsidies. ***Fig. 8 shows that while the majority of government subsidies are housing vouchers, there are neighborhoods with a relatively large number of public housing units, Springwood and South Norwalk, and one neighborhood, Oak Hills, that has a relative large number of project-based housing units.***

Figure 9. Low English Speaking Households
US Census Bureau (2013-2017) ACS estimates, Table S1602

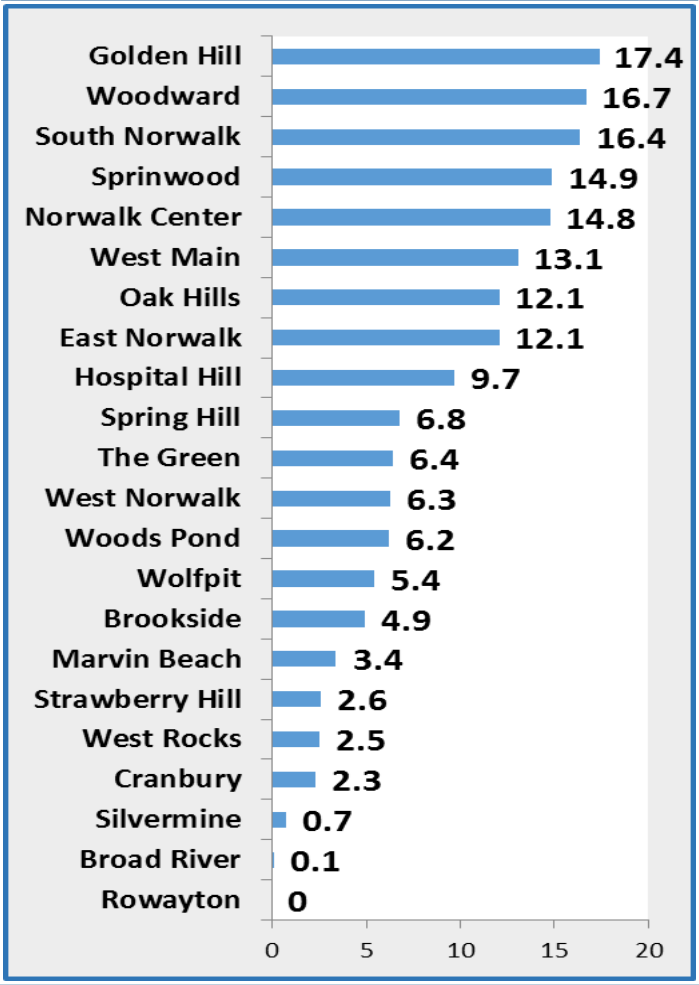


Figure 10. Single Mother Households *US Census Bureau (2013-2017) ACS 5– year estimates, Table S2201*

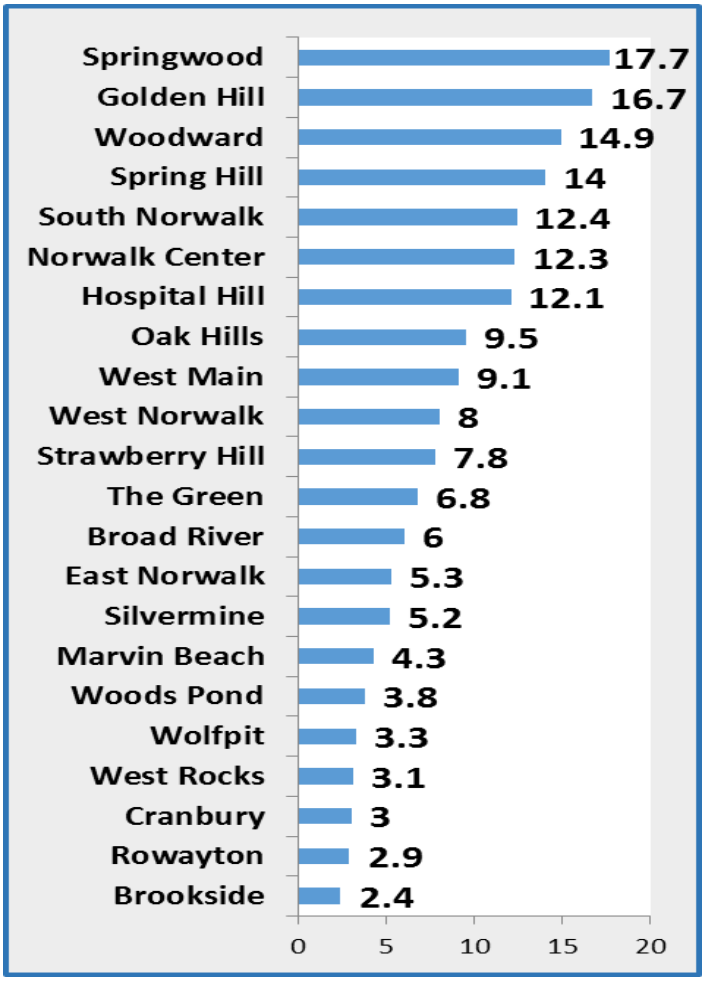


Fig. 9 shows the percentage of low English speaking households by neighborhood, ranging from zero to just under 10 percent in 14 of the 22 neighborhoods and from 12 to just over 17 percent in neighborhoods with the higher numbers of children living at low-income (Fig. 1). A limited English speaking household is where all members, 14 years old and over, have at least some difficulty with English (US Census Bureau, 2019). Although the mechanisms are still unclear, low English language proficiency among both parents and children is associated with: 1) child difficulty in school and poor educational outcomes (Child Trends, 2016); 2) limited access to health and mental health care and social services even when child is in poor health; and 3) less workforce participation among parents and relatedly, less household resources (Skinner et al., 2010).

Fig. 10 shows the percentage of single mother households by neighborhood. Neighborhoods with high percentages of children living in poverty are also the neighborhoods with the highest rates of single mother households. For "ever-poor" children - children through 17 years who have lived below the FPL for at least one year, living in a single mother household does not in and of itself relate to child long-term educational or employment outcomes. But for a child who has experienced persistent poverty (i.e., living below the FPL for at least half of one's childhood), the longer the child lives in a female-headed household, the less likely the child is to complete high school. However, when a persistently poor child lives in a female-headed household that is *also* multigenerational, it can serve as a buffer (i.e., better academic outcomes) (Ratcliffe, 2015).

Figure 11. Percentage Over 16 Who are Unemployed By Neighborhood *US Census Bureau (2013-2017) ACS 5-year estimates, Table DP03*

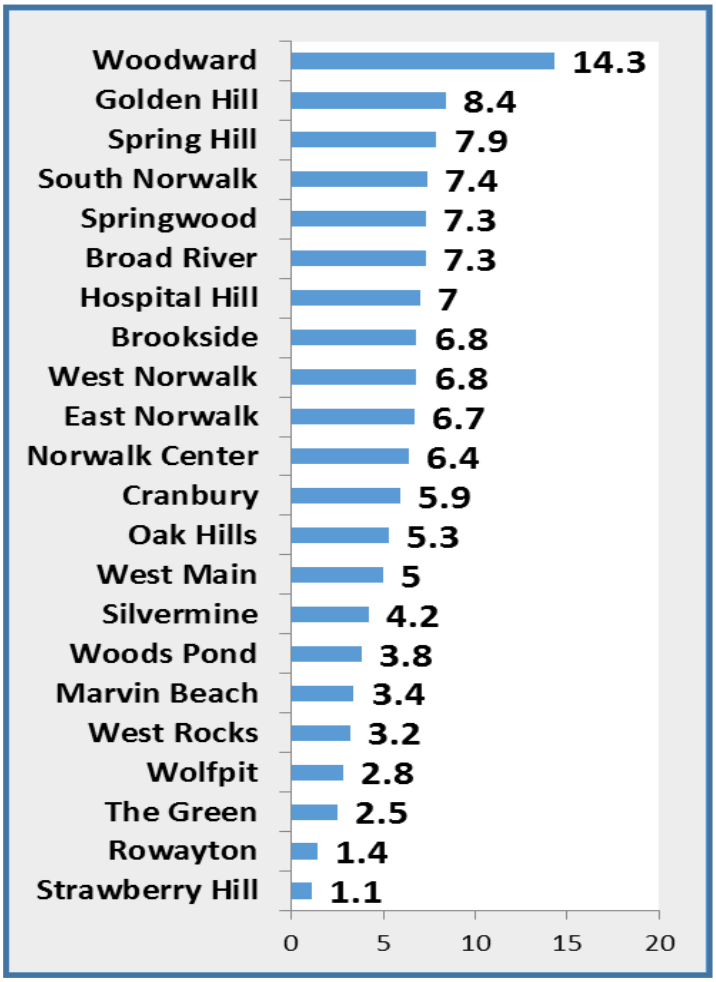


Figure 12. Percentage of Households with Children Under 18 years Receiving SNAP By Neighborhood *US Census Bureau (2013-2017) ACS 5-year estimates, Table S2201*

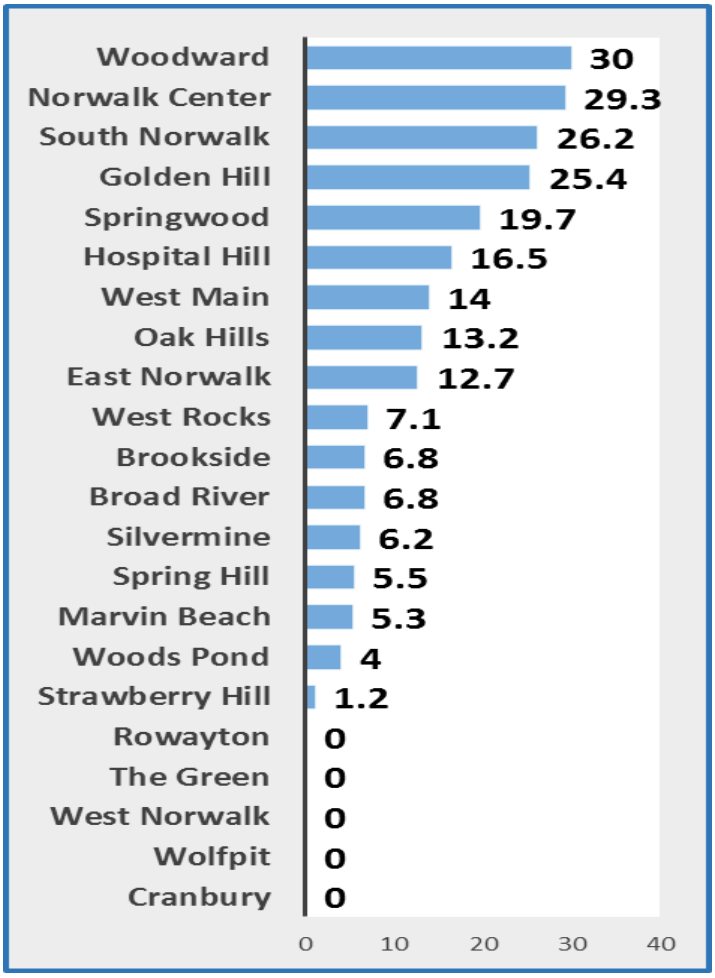
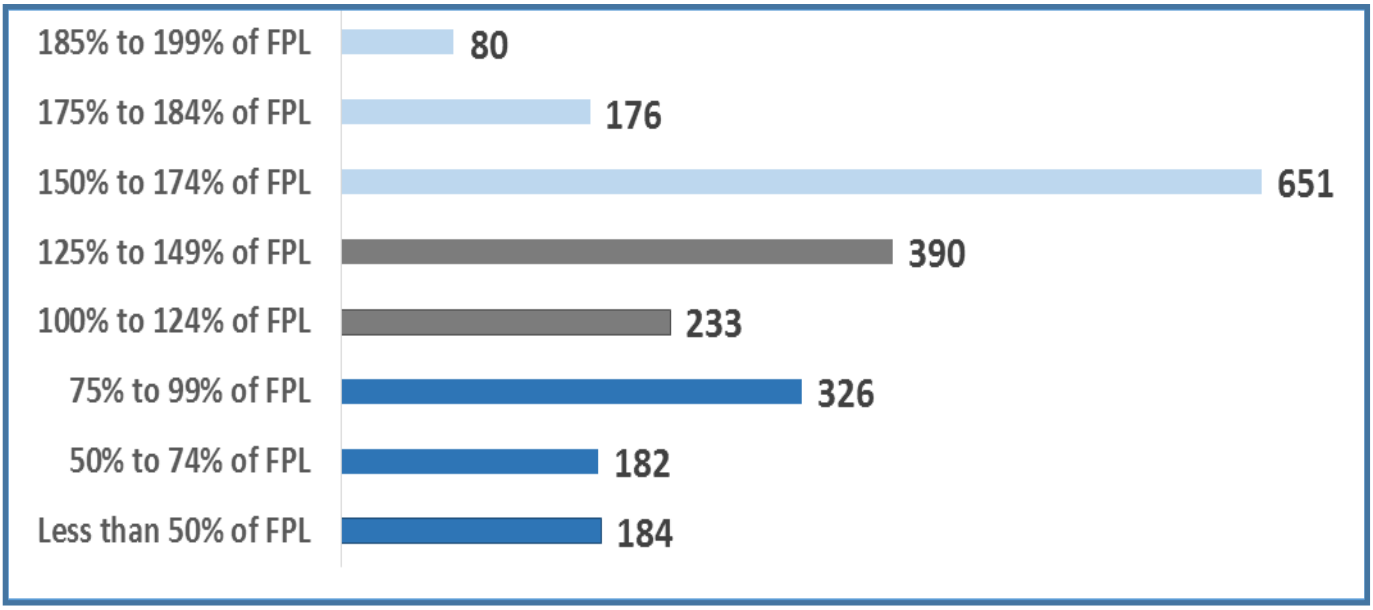


Fig. 11 shows the percentage of individuals over 16 years who are unemployed by neighborhood. Compared to Connecticut's unemployment rate (4.8% in 2017, currently 3.9%) and the US unemployment rate (4.7% in 2017, currently 3.6%) (see www.bls.gov/), the majority of Norwalk neighborhoods have a relatively high rate of unemployment (14 of the 22 neighborhoods are 5% or above). Starting with West Main that had a 5% unemployment rate as of 2017, Fig. 11 shows that the neighborhood rates increase in increments. Golden Hill nearly doubled the CT/US unemployment rates (8.4%). Woodward had the highest unemployment rate by far (14.3%), nearly triple the unemployment rates in CT and the US in 2017.

Fig. 12 shows the percentage of households with children under 18 years receiving Supplemental Nutrition Assistance Program (SNAP) benefits (formerly known as food stamps). Between 25 and 30 percent of households with children under 18 years in Woodward, Norwalk Center, South Norwalk, and Golden Hill received SNAP benefits in 2017 (also have the highest rates of children under 6 living in poverty). In addition, the rate was close to 20% in Springwood and over 16% in Hospital Hill. Research describes how poor children talk about having little access to affordable quality food (Fairbrother, Curtis, & Goyder, 2012) and parents' reports that SNAP benefits are a "lifesaver, "preventing children from experiencing food insecurity (Edin et al., 2013).

Figure 13. Estimated Number of Norwalk Children Under Six Living at Federal Poverty Levels (N= 2,222) (2017) *US Census Bureau (2013-2017) ACS 5-year estimates, Table B17024*



Families need an income equal to about two times the federal poverty level (FPL) to meet such basic needs as housing, food, health care, child care, and transportation. (Cauthen & Fass, 2008). Families with incomes between 100-199 percent of FPL are defined as "low income" or "near poor;" while families who are below 100 percent of the FPL are defined as "poor" (Dalaker et al., 2016). Within poor households, families below 50 percent FPL are defined as "deeply poor." In Norwalk (Fig. 13) there are 184 children living in "deep poverty," an additional 508 children living below poverty (i.e., 182 at 50-74% FPL plus 326 at 75-99% FPL), and 1,530 children living at low income (i.e., 233 at 100-124% FPL, 390 at 125-149% FPL, 651 at 150-174% FPL, 176 at 175-184 FPL, and 80 at 185-199% FPL). Within a single category, the largest group of children are living at 150-174 percent of the FPL (n=651).

Poverty thresholds (as shown in Fig. 13) are calculated by the Census Bureau and updated each year. The census poverty measure is family-based (not individual): It depends on an individual's income *and* the income of any other family member with whom the person lives and shares resources (i.e., related to family head by birth, marriage, or adoption). The total money income is compared to a dollar threshold that is based on family composition. In 2017, the poverty level for a family of four was $24,600 (2019 FPL is $25,100) and for a family of three it was $20,420 (2019 FPL is $20,780). For a family of four with two children under 18 years, the 2017 poverty level was $24,858, and for a family of four with three children it was $24,944 (US Census Bureau, 2019).

Figures 14a-14h show the number of children living at each of the poverty thresholds by neighborhood. The majority of young children living in deep poverty reside in Springwood, Norwalk Center, Spring Hill and Woodward, with a small number residing in Cranbury (Fig.14a). The majority of poor children (Figs.14b & 14c) live in Woodward, Springwood, and Golden Hill. The neighborhoods with the highest rates of near poor children are Hospital Hill, Springwood, Oak Hills, South Norwalk and East Norwalk. Low numbers of poor and near poor children also reside in some of the wealthier neighborhoods.

Figure 14. Estimated Number of Norwalk Children Under Six Living at Federal Poverty Levels (N= 2,222) (2017) By Neighborhood *US Census Bureau (2013-2017) ACS 5-year estimates, Table B17024*

Fig. 14a. # of Children Under 6 Living at <50% of the FPL (n=184)

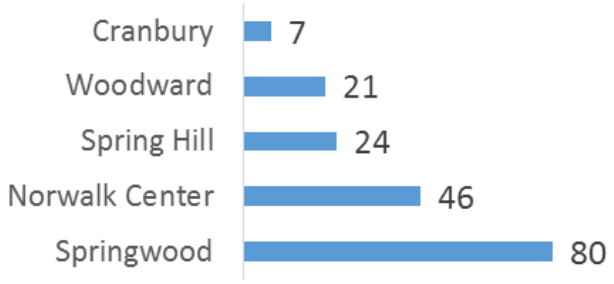


Fig. 14b. # of Children Under 6 Living at 50-74% of the FPL (n=182)

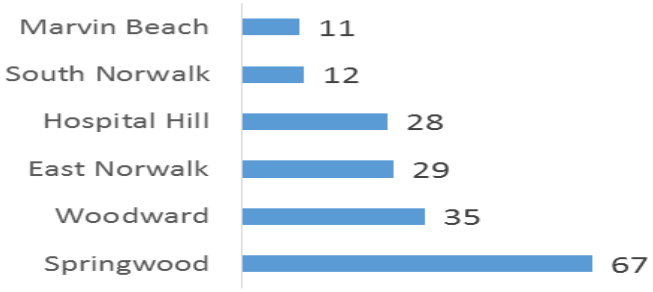


Fig. 14c. # of Children Under 6 Living at 75-99% of the FPL (n=326)

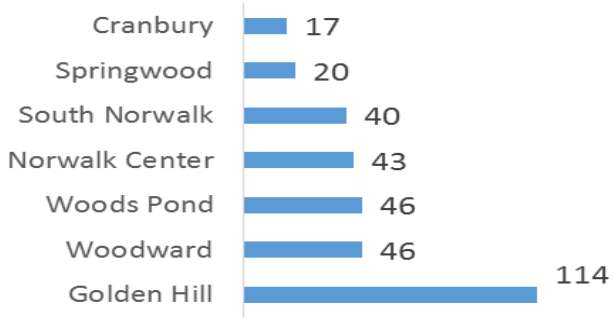


Fig. 14d. # of Children Under 6 Living at 100-124% of the FPL (n=233)

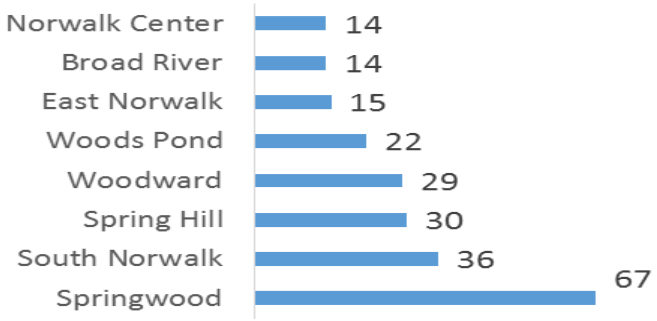


Fig. 14e. # of Children Under 6 Living at 125-149% of the FPL (n=390)

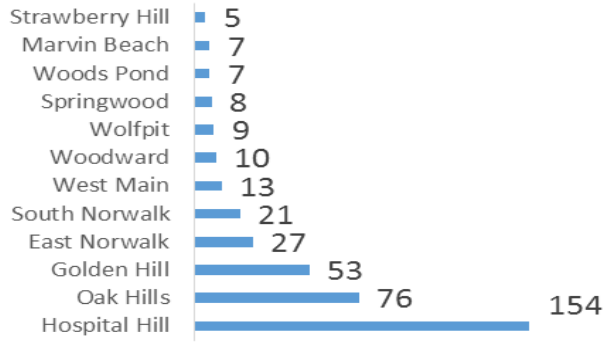


Fig. 14f. # of Children Under 6 Living at 150-174% of the FPL (n=651)

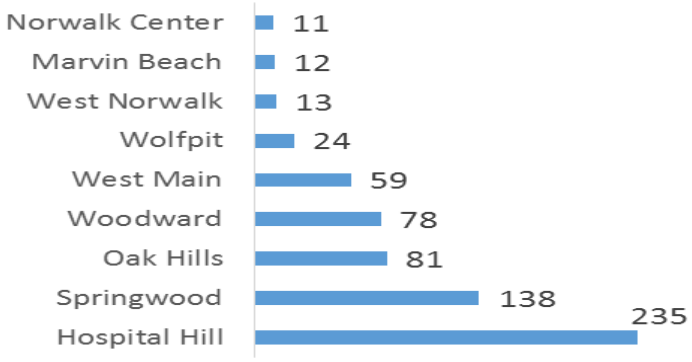


Fig. 14g. # of Children Under 6 Living at 175-184% of the FPL (n=176)

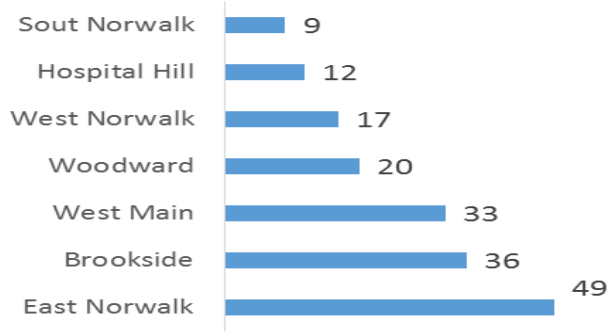
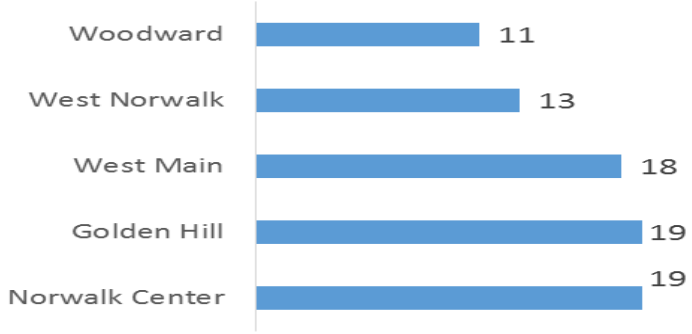


Fig. 14h. # of Children Under 6 Living at 185-199% of the FPL (n=80)



Young Children Living at or Below Poverty or at Low Income: Putting It Into Context

Figure 15. Comparing Neighborhood Child Poverty Rates with US and Connecticut (<50% to <200% FPL)

US[1]	Northeast Region[1]	Connecticut[2]	Norwalk[3]	Norwalk Neighborhoods[3]				
				Norwalk Center	Hospital Hill	West Main	Marvin Beach	Rowayton
45%	38%	31%	36%	85%	70%	44%	14%	0%

[1]US Census Bureau (2016) ACS 2015 1-year estimates, Table S1701; [2]US Census Bureau (2008-2012) ACS 5-year estimates, Table B17024; [3]US Census Bureau (2013-2017) ACS5-year estimates Table B17024

Children as a group are overrepresented among our nation's poor: Children under 18 years make up 23 percent of the US population but comprise 33 percent of all people in poverty (Jiang et al., 2017). In the US, an estimated one in five children under 18 years (21%) live in poverty (<100% FPL) compared to one in eight adults, and an additional 3 percent live in low-income families (i.e., 100-199% FPL) (Jiang et al., 2017). Tracking children over time (versus annual rates) paints an even bleaker picture: nearly four out of every 10 children (38.8%) are poor for at least one year by the time they are 18 years old (Jian et al., 2017; Ratcliffe, 2015). Analysis by race shows that Black children versus White children are far more likely to be "ever poor" - 75 percent of all Black children versus 30 percent of all White children are poor at some point during childhood. Additionally, among all children under 18 years, nearly 4 in 10 Black children (38.5%) are "persistently poor" (live below 100% FPL for at least half of their childhood) compared to fewer than 1 in 10 white children (4.3%) (Jian et al., 2017). ***Young children under age six years are the most vulnerable:*** nationally 45 percent of children under 6 years are poor or near poor (<200% FPL) as compared to 41% of children 6 to 17 year olds. US children under 6 years residing in low income households are disproportionately higher for Black (68%), American Indian (65%) and Hispanic (63%) children as compared to White (33%) and Asian (29%) children, and children of some other race (40%).

Figure 15 shows differences in rates of poverty and low income among young children in different parts of the country. Within this broader context, the disparity between Norwalk neighborhoods in child wellbeing and quality of life is all the more stark. While an estimated 45 percent of children under 6 years in the US are living at or below poverty or at low income, the rate is the lowest in the Northeast Region (38 %) as compared to all other US regions (not shown in table), including the Midwest (44%), the West (45%) and the South (49%). Moreover, within the Northeast, the rates for Connecticut are on the lower end still, at 31 percent, while Norwalk is slightly higher than the state at 36 percent (but still substantially lower than the US rate). Compared to the rates of young children living in poverty or at low income in Connecticut and Norwalk overall, the rates within some of the Norwalk neighborhoods range from a startling 85 percent in Norwalk Center and 70 percent in Hospital Hill (both well above US, CT, and Norwalk percentages), to 44 percent in West Main (similar to US percentage but higher than CT and Norwalk), 14 percent in Marvin Beach (significantly lower than US, CT and Norwalk percentages), and finally zero percent in Rowayton. The differences in these same neighborhoods in terms of race and ethnicity (see Figs. 4 & 5) indicate that similar to the US trends, percentages of young children who reside in poor and low income family households in Norwalk are disproportionately Black and Hispanic.

Figure 16. Neighborhood-Level Demographics for the Five Neighborhoods with Highest Rates of Children Under 6 Years Living in Poverty (<100 FPL)

Neighborhood –Level Demographic	Norwalk Center	Golden Hill	South Norwalk	Springwood	Woodward
%/# Under 6 Living in Poverty (<100% FPL)	*57% (89 out of 156)*	*40% (114 out of 282)*	*36% (52 out of 143)*	*35% (167 out of 470)*	*31% (102 out of 324)*
% Adults ≥25 years with Less Than HS Education	21.6%	30.8%	17.7%	26.6%	31.4%
% Adults ≥16 Years Who Are Unemployed	6.4%	8.4%	7.4%	7.3%	14.3%
% Hispanic/	42%	52%	37%	49%	39%
% Hispanic In Poverty	90%	83%	67%	55%	52%

Young children with parents who are unemployed or work part-time are more likely to live in poverty compared to young children with parents who are full-time employed. Similarly, low levels of parent education (associated with lower income) also increases the likelihood that a child will live in a poor household (Dalaker et al., 2015; Hernandez, 2011; Jiang et al., 2017; Garcia & Weiss, 2017). *For US children under the age of 6 years with:* At least one parent who works full time year round, 33% live in low-income families; At least one parent that works part time or part year (and no full time), 74% are at low-income; No employed parents, 87% live at low-income; At least one parent with some college or additional education, 32% live at low-income; Parents with a high school degree but no college, 77% live at low-income; Parents who have less than a high school degree, 85% live in low-income families.

Although we do not have family-level data to compare the same for Norwalk's young children, neighborhood-level trends as shown in this report supports this research. Figure 16 shows relevant neighborhood-level demographics for the five neighborhoods with the poorest children (i.e., children living at <100% FPL). Norwalk Center, with a total of 156 children under 6 years of age, has the highest *percentage* of young children living below 100% FPL (57% or 89 out of 156). Springwood has the highest *number* of children living below 100% FPL (n=167), followed by Golden Hill (n=114), and Woodward (n=102), and South Norwalk (n=52). Compared with other neighborhoods, these five neighborhoods also have higher rates of adults with less than a high school education, and adults who are unemployed (see Figs. 6 & 11). Also, compared to the overall percentage of Hispanic households in these neighborhoods (Fig. 5) the percentage of Hispanic households living in poverty (Fig. 16) is disproportionately high.

Figure 17 compares rates of deep poverty (i.e., families living at <50% FPL) among young children in Norwalk neighborhoods with the US, CT and Norwalk overall. An estimated 46 children out of the 156 children (29%) in Norwalk Center live in deep poverty, almost three times higher than in the US (11%), and much higher than in Connecticut (8%)or Norwalk (3%); 80 children in Springwood (17%) and 24 children in Spring Hill (14%) are deeply poor.

Figure 17. *% Children Under 6 Years* Living in Deep Poverty (<50% FPL; ≤$12,400 for family of 4 with 2 children)*

United States	Connecticut (<9 years*)	Norwalk (184 out of 6,218)
11%	8%	3%
Norwalk Center (46 out of 156)	**Springwood (80 out of 470)**	**Spring Hill (24 out of 175)**
29%	17%	14%

Young Children Living At, Below, or Just Above Poverty: Outcomes and Public Assistance

Socioeconomic status is one of the biggest predictors of children's readiness for school (i.e., academic and non-academic skills at kindergarten) (Garcia & Weiss, 2017). Concentrated poverty (such as what is found in Norwalk's centralized neighborhoods), the corresponding lack of material resources and economic opportunity, and the stress associated with having little material resources, directly and indirectly impact a young child's early development (Garcia & Weiss, 2017; Quintet al., 2018; Ratcliffe, 2015). To a greater or lesser extent, families who are living in deeply poor, poor, or near poor households, do not have the means to meet their basic needs. This includes such necessary things as housing, health care, transportation, food, child care, and diapers (Cauthen & Fass, 2008). Young children and families living at, below, or just above poverty are less likely to have access to well-funded, high quality child care programs or have the time or resources for participating in organized learning activities. In addition, the direct experience of chronic poverty-related stress on children can affect early brain development, impacting children's long-term response to stress and how they regulate themselves (i.e., self-control and approaches to learning), as well affecting their immune system and physical health. Without intervention or support, the gaps rooted in early development persist throughout the school years (i.e., lower academic success, less likely to complete high school, or attend or complete college) and erode employment and economic prospects throughout a lifetime. Consequently, material deprivation, and the associated challenges often continues from one generation to the next (Garcia & Weiss, 2017; Quint et al., 2018; Ratcliffe, 2015).

Length of time living in poverty, being poor in a poor neighborhood, and the severity of poverty have differential effects on child outcomes (Ekono et al., 2016). A longitudinal analysis of 4,000 US children (Hernandez, 2011) found that compared to 6 percent of non poor children who did not graduate high school on time, the rate for ever poor children (poor at least one year during childhood) increased to 26 percent. For persistently poor children (poor for more than half their childhood) it increased even further to 35 percent. In a related analysis, the study also shows the additional effects of neighborhood-level poverty above and beyond family-level poverty: While 16 percent of children who are not reading proficiently by third grade did not graduate from high school on time (i.e., 4 times greater than for proficient readers), for poor children who were not reading proficiently at third grade, the rate was 26 percent, and for poor children living in neighborhoods with concentrated poverty, it further increased to 32 percent.

Children born into deep poverty (see Fig. 17) often reside in families characterized by serious, compounding problems (e.g., the threshold for a family of 4 living at <50% FPL in 2017 was $12,400). Challenges include a mix of unstable housing, unreliable child care, lack of education, and mental and physical health problems or chronic illnesses, as well as addiction, homelessness, criminal records, and disabilities (Lei, 2013). While 59 percent of young children living above poverty (i.e., middle income quintile) begin kindergarten with the skills needed to learn (e.g., acceptable behavior, and pre-reading and math skills), the percentage for poor and deeply poor children is 36 and 39 percent, respectively. As children continue to grow, the gap between the poor and the deeply poor also continues to grow, so that by adulthood, there are significant differences (Cuddy et al., 2015). Compared to poor or near poor children, deeply poor children are three times more likely to experience greater toxic stress and adverse experiences growing up, and are three times more likely to be in deep poverty as adults (Nolan, 2019).

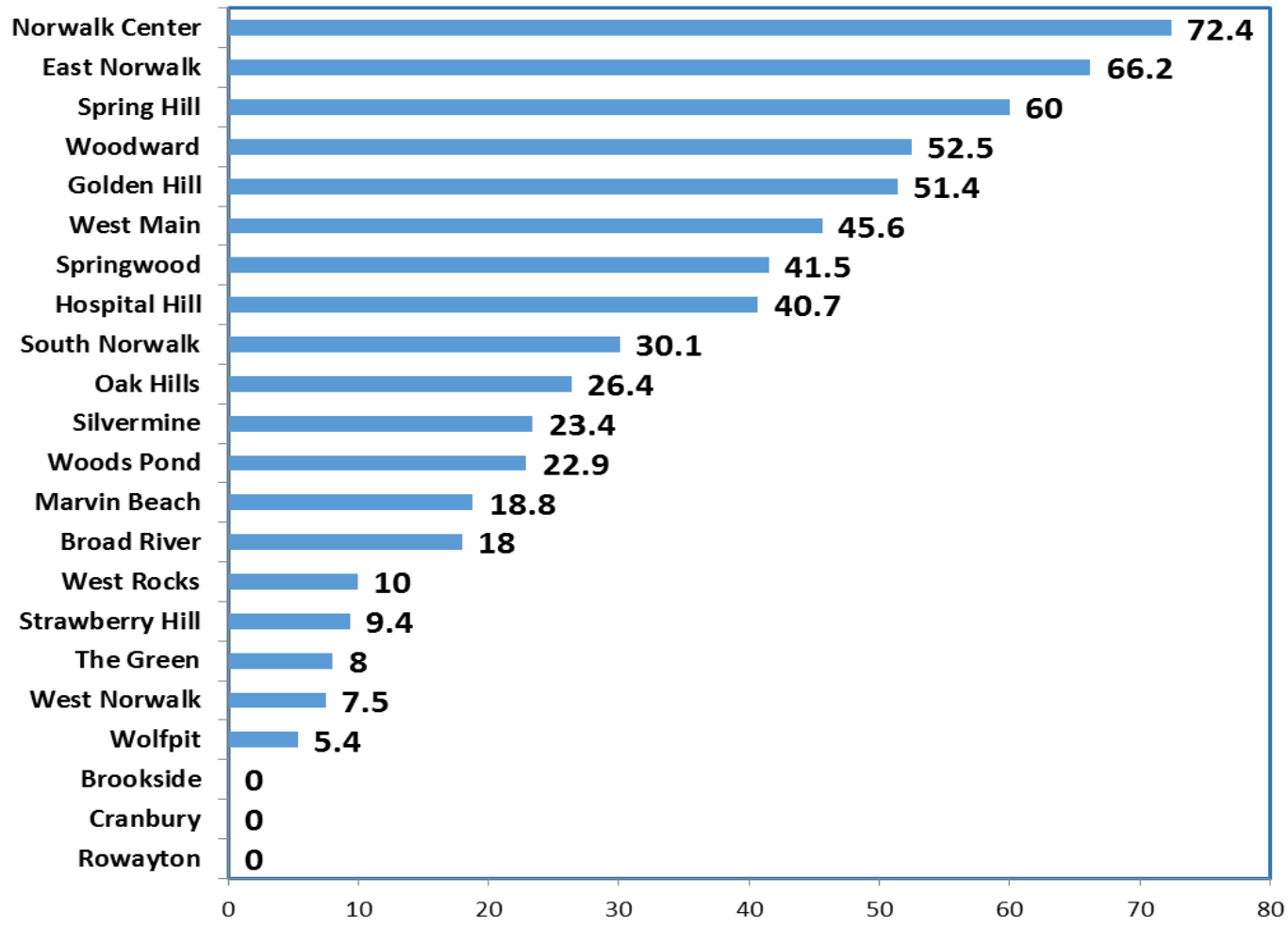
Although there is relatively little research on children's actual experiences of living in poverty, what little there is indicate that children are acutely aware of the stigma of being poor. Children as young as three years from different socioeconomic backgrounds are able to sort photographs of people who are either wealthy or poor using material cues (i.e., personal effects) (Ramsey, 1991). While children as young as 4 years of age will choose to befriend children depicted in photographs that are matched with high-wealth versus low-wealth possessions (Shutts et al., 2016).

In narratives on experiences living in poverty, school-age children talk about not having enough money for quality food, or for items such as clothing and school supplies. They are aware that their appearance singles them out (e.g., non brand-name clothing), and they feel isolated when they cannot participate in peer-group activities due to admittance fees or equipment costs. They are also aware of the toll that financial struggles takes on their parents, and carry the extra burden of worrying about their parents' health. On top of their worry, children feel the stigma of poverty and are embarrassed by their families' financial situation, often to the point where they will avoid confiding in their friends or even supportive adults (e.g., a school official who could potentially identify a means for participating in a costly activity). It is the highlighting of differences in material resources and resulting stigma that children fear. When children understand the negative stereotypes about being poor, they worry about how they will be perceived. The resulting anxiety can lead to poor outcomes (Quint et al., 2018

The poverty guidelines are used to determine eligibility for federal programs that provide financial support for basic needs and subsidies for low income and poor families. These guidelines are a simplified version of the federal poverty thresholds, and are issued each year by the Department of Health and Human Services (HHS). Receipt of public benefits varies among families with young children living at poverty or low income. For example, the Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps) is available to those who earn 130 percent of the federal poverty level (Fig. 12 shows neighborhood-level percentages in 2017 for families with children under 18 years); for a household of four in 2019, it is 1.3 x $25,100 = $32,630. In addition to SNAP, other programs that use percentage multiples of the guidelines to determine eligibility include Medicaid (138% FPL) and the Children's Health Insurance Program (up to 300% FPL with family cost sharing) (see Figure 18 on the following page), as well as the supplemental nutrition program for Women, Infants, and Children (WIC, 100-185% FPL), Head Start (<100% FPL), and other child care subsidies with sliding fee scales such as School Readiness (see Fig. 26). Federal programs that provide cash assistance for those who are both working and are living in poverty, such as the Temporary Assistance for Needy Families (TANF) and the Earned Income Tax Credit (EITC), have income eligibility criteria (low or very low income) but don't use the poverty guidelines.

By giving information to the Department of Social Services about household needs, income, assets, and monthly bills, families can find out if they qualify for help to buy food, receive health care or child care coverage, or get cash assistance. These programs are a safety net for many families, and have positive effects on children's health and development, and on parent employment. However, parents also report: 1) The application process is often lengthy and confusing; 2) Program "rules" are inflexible; and 3) Subsidies are often insufficient (and/or are withdrawn once families make a certain income, creating instability). Safety net programs are not designed to provide comprehensive support that those living in deep or persistent poverty need (Cuddy et al, 2015; Lei, 2013; Quint et al, 2018).

Figure 18. Percent Children Under 6 Years Receiving Public Health Insurance By Neighborhood *US Census Bureau (2013-2017) ACS 5-year estimates, Table S2704*



Public health insurance reaches many more economically disadvantaged children under age 6 years than private plans, covering 76 percent of low-income children and 87 percent of poor children in this age group (Jiang et al., 2017). Through Medicaid (enacted in 1965 as part of the Social Security Act) and the Children's Health Insurance Program (CHIP, created in 1997 to build on Medicaid coverage for low-income children), families are provided no-cost or low-cost health insurance for their dependent children. Both are federal programs that are implemented through the states with joint financing (i.e., federal programs provide 57% in matching funds for Medicaid spending and 70% for CHIP spending). Medicaid coverage for children, parents and pregnant women, referred to as Husky A in CT, is available to families with income up to 138% FPL, while CHIP (referred to as Husky B in CT) provides coverage for children and families with incomes too high to qualify for Medicaid (up to 300% FPL) but who can't afford coverage (family cost-sharing may apply). Figure 18 shows that the neighborhood with the highest percentage of children under 6 years receiving public health insurance (72.4%) is Norwalk Center (where 85% of children under 6 years are living at or below poverty or low income). In addition, the majority of young children in East Norwalk, Spring Hill, Woodward, and Golden Hill, also neighborhoods with very high rates of young children living at low income, are receiving public health insurance (ranging from 51% to 66%).

In 2015, there was a total of 1,151 births in Norwalk. The racial/ethnic breakdown was as follows: 509 were born to White non-Hispanic mothers, 394 were born to Hispanic mothers (of any race), 136 were born to Black non-Hispanic mothers, and 110 were born to non-Hispanic mothers of other races.

Figure 19. Total Number/Percentage of Births by Race/Ethnic Group (2015)

Total Births (2015)	White non-Hispanic	Hispanic	Black non-Hispanic	Other non-Hispanic
1,151*	509 (44%)	394 (34%)	136 (12%)	110 (10%)

* There were also 2 births to mothers of unknown race or ethnicity.

A child's birth circumstances have a large effect on his or her chances in life. Because many risk factors have an impact during the first few weeks of a pregnancy, early and continued prenatal care is critical for preventing such adverse outcomes as low birth weight, preterm birth, and infant mortality (Robbins, Zapata, Farr et al., 2014). For example, unintended pregnancies (when a woman is unaware of being pregnant for the first weeks or more) are associated with worse health outcomes for both mothers and infants. In addition, unintended pregnancies have also been associated with increased family stress and financial instability, and have even been related to increased risk of family violence. The unintended pregnancy rate in Connecticut is estimated at about a third of all live births with higher rates found among non-Hispanic Blacks, Hispanics, younger women (24 years and younger), and women who are on Medicaid or are uninsured (Klaus-Stevens, Frost, Carey, & Karanda, n.d.).

Klaus-Stevens and others (n.d.) also highlight that the majority of infant deaths in Connecticut are from preterm-related causes (46%) and perinatal conditions (19%). These causes are also what account for the racial and ethnic disparities in infant mortality in the state (Hirai et al., 2014). Nationwide, Black, American Indian and Alaska Native women are more likely than White women to experience complications during a pregnancy, and are nearly four times more likely to die from pregnancy or child birth. Poor maternal health outcomes for women of color have been related to the effects discrimination has on health, as well as the effects of living in poverty, experiencing food insecurity, living in hazardous conditions, and lack of health insurance (National Partnership for Women & Families, 2019).

Late or no prenatal care. Figure 20 shows that 13.7 percent of mothers in Norwalk with new babies in 2015 had late prenatal care (i.e., beginning in second or third semester) or no care, slightly higher than the 11.7 percent statewide. However, con-

Figure 20. Percentage of Newborns Receiving Late, No or Inadequate Prenatal Care and/or with Low or Very Low Birth Weight *CT Department Public Health Prenatal and Birth Vital Statistics (2015)*

Prenatal Care and Low Birth Weight	Connecticut	Norwalk	Norwalk Prenatal and Birth Data by Race/Ethnicity			
			Black non-Hispanic	Hispanic	White non-Hispanic	Other race non-Hispanic
Late or No Prenatal Care	11.7%	13.7%	20.6%	22.6%	5.9%	9.1%
Non-Adequate Prenatal Care	23.7%	21.8%	31.1%	25.3%	18.7%	10.9%
Low or Very Low Birth Weight	9.5%	7.9%	16.9%	7.4%	5.9%	8.1%

sistent with the research cited in the above, the racial/ethnic groups with the highest rates of late or no prenatal care are Black non-Hispanic (20.6%) and Hispanic (22.6%) mothers. These rates are much higher than both the state and city percentages, while the percentages of late or no prenatal care for White non-Hispanic and non-Hispanic mothers of other races were much lower (5.9% and 9.1%, respectively).

Non-adequate prenatal care. In addition, 21.8 percent of the 1,151 mothers with new babies had non-adequate prenatal care (n=250), slightly lower than the statewide percentage (23.7%). The non-adequate category includes both 'Inadequate' prenatal care (mother received 0-49% of expected visits) and 'Intermediate' prenatal care (mother received 50-79% of expected visits) (as measured by the Adequacy of Prenatal Care Utilization (APNCU) Index). The racial/ethnic group with the highest rate of inadequate prenatal care was among Black non-Hispanic mothers, 31 percent of 136 newborns (n=42), well above Norwalk's overall percentage and the statewide percentage. Hispanic mothers also had a relatively high rate of inadequate prenatal care, 25 percent of 394 (n=98), followed by 19 percent of the 509 White non-Hispanic mothers (n=96), and 11 percent of 110 non-Hispanic mothers of some other race (n=12).

There were also ninety-one newborns out of the 1,151 births in Norwalk in 2015 (7.9%) with low birth weight (less than 5.5 lbs.) or very low birth weight (less than 3.3 pounds) (Fig. 20). This was lower than the 9.5 percent statewide. However, similar to late, no and inadequate prenatal care, Black non-Hispanic mothers had the highest rate of low birth weight, 16.9 percent of 136 newborns (more than double Norwalk's overall rate), followed by relatively lower rates among the other three groups, 7.4 percent of Hispanic mothers, 8.1% of non-Hispanic mothers of other races, and 5.9 percent of White non-Hispanic mothers. The primary cause of low birth weight is premature birth (being born before 37 weeks gestation). Much of a baby's weight is gained during the latter part of pregnancy.

Prematurity can lead to long-term health problems for babies, can affect long-term educational and employment outcomes, and has long-lasting financial effects. A baby's brain at 35 weeks weighs only two-thirds of what it will weigh at 39 to 40 weeks. This is why if a pregnancy is healthy, it is best to stay pregnant for at least 39 weeks (Institute of Medicine, 2007). Premature babies are more likely to have learning and behavior problems throughout childhood, and have a harder time in school than babies born on time; about one in three children born prematurely needs special school services at some point during their school years. Even babies born at 36 to 38 weeks are more likely to struggle in school. The Institute of Medicine (2007) estimated the annual cost associated with premature births to be $26.2 billion each year. These costs include an estimated cost of $16.9 billion medical and health care costs for the baby, $1.9 billion in labor and delivery costs for the mother, $611 million for early intervention services for children from birth to age 3 with disabilities or developmental delays, $1.1 billion for children with resulting disabilities receiving special education services, and $5.7 billion in lost work and pay for people who are born prematurely.

Being a teenage mother is linked to serious economic difficulties: As compared to non-teen mothers, young mothers who have a premarital birth are 50 percent more likely to have inconsistent employment and six times more likely to be persistently poor by the time they are 25 to 30 years old (Ratcliffe & McKernan, 2012). Figure 21 shows that in 2015, 36 babies (3%) were born to teenage mothers in Norwalk; 29 of whom were of Hispanic ethnicity (80% of all the teenage mothers). Statistical comparison of town to state teen birth rates per 1,000 of the female teenage population ages 15-19 show that Norwalk

had a significantly higher rate than the state of Connecticut from 2011 through 2015 (17% in Norwalk versus 13% in Connecticut) (CT Department Public Health, 2015).

Out of the 1,151 births born to mothers residing in Norwalk in 2015, 48 percent (n=556) were foreign-born mothers (based on mothers' self-reports). By far, the largest percentage of foreign-born mothers with new born babies in 2015 were Hispanic (314 out of the 556, 56%). Figure 22 shows that out of the 394 births born to Hispanic mothers, 80 percent (n=314), were born to foreign-born mothers. A similarly high percentage, 77 percent (n=85), of the 110 births born to non-Hispanic mothers whose race was other than White or Black were foreign-born; while 56 percent (n=61) and 19 percent (n=96) of births born to Black non-Hispanic and White non-Hispanic mothers, respectively, were foreign-born mothers. Given the previously highlighted research that estimates 31 percent of foreign born individuals in the metro area are people who are here illegally (Pew Center, 2019), it might be that a subgroup of children are born to mothers who are undocumented immigrants, a potentially isolating factor.

Becoming a mother, especially for the first time, is often a pivotal point in a women's life. Along with a new baby, a mother of an infant has to adapt to a new identity. By actively engaging the child and incorporating the care of the child into the family's

Figure 21. Total Number of Teenage Births by Race/Ethnic Group (2015)

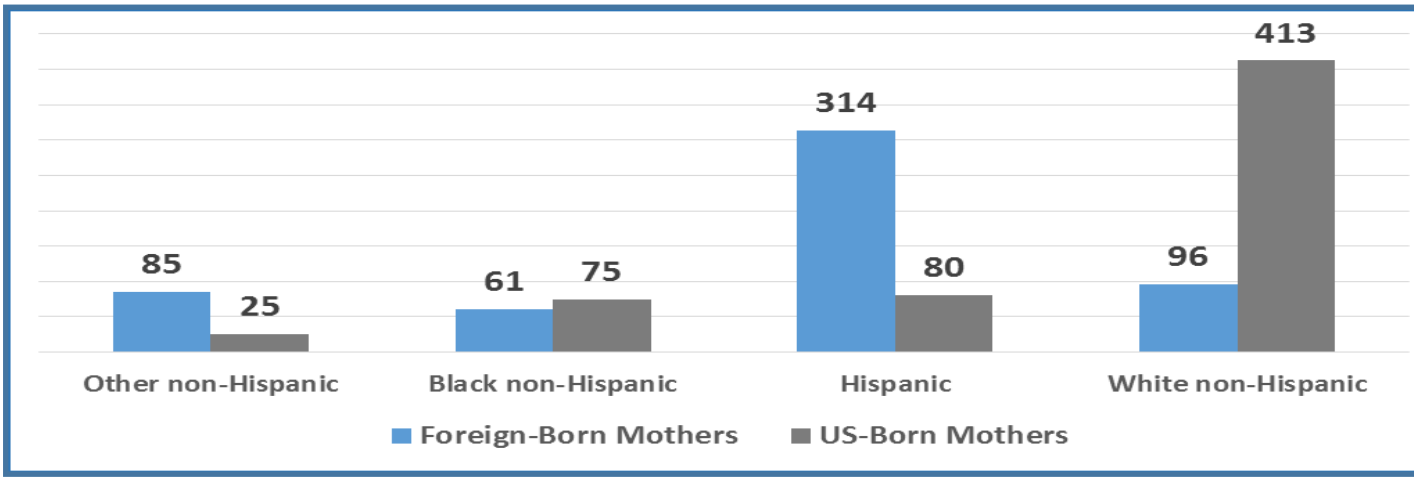
Total Teenage Births (2015)	White non-Hispanic	Hispanic	Black non-Hispanic	Other Race non-Hispanic
36	2	29 (80%)	3	2

day-to-day life, the mother grows and changes in new ways (Mercer, 2014). Mothers report that a maternal identity is triggered through a combination of having regular contact with their newborn, assuming responsibilities of the maternal role, and experiencing feelings of love and protectiveness. If she sees herself as competent in her role as a mother, then she will tend to be positive, and in turn this will affect the way she nurtures her new baby.

The key to the transition is engagement: A new mother has to commit to mothering and actively involve herself in the care of the child. Becoming a mother is then validated by the infant's response (Koniak-Griffin, 1993). This reciprocal relationship is also critical for the child's development. When an infant coos in response to a mother's care, and the mother answers back with gestures and speech, the connections in the child's brain that support communication and social behavior are reinforced (Center on the Developing Child at Harvard University, 2009).

For some mothers, the transition can be diffi-

Figure 22. Number of Births to Foreign-Born and US-Born Mothers By Race/Ethnicity (2015)



cult particularly as they experience the demands of care giving. Adjusting to becoming a mother is heavily influenced by life circumstances. In particular, a mother's attitude toward parenting is often based on her own nurturing (Crockenberg & Lekes, 2003). Factors related to poverty and economic insecurity - scarce resources, minimal social supports - take a profound toll on parents' energy, patience, sense of control, and mental health. In turn, psychological stress affect parent interactions with their children and undermine their ability to focus on their children's needs (Crockenberg & Lekes, 2003).

Mothers of infants are more likely than other women to experience depression. As compared to six to seven percent of adults, 13 percent of mothers experience major depression and for high risk mothers (young, low-income, isolated), rates range from 30 to 50 percent (Ammerman et al., 2010). Symptoms include a low mood, often characterized by uncontrollable crying, little to no interest in typically pleasurable activities, sleeping and eating either too much or too little, little to no energy, problems concentrating or making even simple decisions, and excessive guilt. Not surprisingly, mothers who experience such symptoms are far less responsive to their children. Exposure to even one episode of maternal depression can have serious adverse effects for the subsequent development of the child (Hay et al. 2003).

Maternal depression has been linked to two types of parenting that disrupt the "serve and return" interaction between mother and child: disengaged/withdrawn, and hostile/ intrusive. In response to disengaged or hostile parenting, infants themselves exhibit negative behavior including signs of distress, anger and high physical activity and arousal (Bagner et al., 2010; Center on the Developing Child at Harvard University, 2009). If this type of interaction occurs continuously over time, the negative affect shown by infants with their depressed mothers will occur even when interacting with non-depressed adults (Bagner et al., 2010). Exposure to such parental behaviors result in more general effects with one possible consequence being that the child's arousal systems become sensitized to some or all potentially challenging situations. For example, maternal depression in infancy predicts increased levels of cortisol, a stress hormone, which in turn is linked with internalizing problems such as anxiety, social wariness, and withdrawal (Rubin et al. 2009). As a result, an infant's own negative affect interferes with their ability to process information and to effectively learn (Field, 1992).

The effects of maternal depression on a child's development are more problematic and more durable the earlier it occurs in a child's life, the more severe the episode, and if there are multiple episodes (Essex et al., 2001; O'Hara, 1997). In one study, maternal depression during infancy was associated with major depressive disorder in offspring as late as 18 years of age (Forman et al., 2007). Other long term effects of maternal depression on child outcomes include anxiety, conduct, and substance abuse disorders, and persistent problems with social functioning and education and employment (Bagner et al., 2010; Forman et al., 2007; Weissman et al., 2006). Connors-Burrow and others (2015) found that even low-level symptoms of depression (i.e., subthreshold) in mothers of young children (i.e., 14 months of age) were associated with both internalizing and externalizing behavior problems at age 11.

The impact of unavailable or insensitive parenting associated with maternal depression is recognized as a major public health problem (Almond, 2009; Wisner et al., 2006). Although there is substantial literature documenting efficacy of interventions for treating maternal depression, many new mothers do not access available services (Ammerman et al., 2009; Abrams et al., 2009). For less advantaged mothers in particular, it may be difficult to recognize depressive symptoms in the context of multiple stressors (Abrams et al., 2009).

The processes of brain development during the first years of life is a window of great vulnerability and great potential. By the time a baby is born, they are already actively learning and trying to make sense of their world. Rather than being passive learners, they are naturally inclined to investigate. For instance, an infant baby is able to discern when an adult is engaging them: By using eye contact and infant-directed language (e.g., using a high or lyrical pitch), you can signal a teaching moment, and focus a young child's attention. Babies are aware that what people are looking at is what they are paying attention to; they know that people's behaviors have a purpose and that people have positive or negative emotions. Babies use what they learn from ongoing interactions to develop a mental map of what is going on in others' minds and how others' feelings and thoughts are similar to or different from their own. A toddler can 'read' their mother's expression, for example, to determine how they themselves should approach or interpret a situation. Their developing "theory of mind" shapes how they react and interact with people, what and how they learn from them, how they assess the fairness of an action, and how they evaluate themselves. At the same time, they are also making significant strides in more observable learning—development of language, learning how objects function, and understanding characteristics of people and animals for example. Each type of developmental growth, the implicit and the explicit, are connected with anatomical regions of the brain which is also going through rapid development. The brain circuitry of a young child is especially responsive to environmental experience. Because of its neural plasticity, the brain can change in anatomy and function in response to stimulation. There is also increasing evidence that the social environment not only shapes how a child learns and reacts, but also affects the expression of genes through molecular "triggers" and "brakes" (epigenetics). The interactions between the way a child is nurtured (i.e., environment) with a child's nature (i.e., genes) on the developing brain can lead to any number of adaptations and development pathways in such important areas as stress reactivity and coping, focused attention, memory, and immune functioning (Institute of Medicine and National Research Council, 2015).

Parents, family members and community members all contribute to the state of a young child's mental health (Michaels, 2012). An infant's mental health refers to how an infant: 1) experiences, expresses, and regulates their emotions; 2) learns to establish trust; and 3) explores their environment while managing fear and trepidation when they arise (Zero to Three, 2016). Children exposed to psychosocial adversities during the first years of life, when they have limited coping skills, are particularly at risk of experiencing long-lasting, negative outcomes (Lieberman Knorr, 2007).

Controlling for poverty duration, Ratcliffe and McKernan (2012) found that children who were born into poverty have significantly poorer outcomes relative to children who are first poor later in childhood. Early exposure to poverty or exposure to extreme poverty (e.g., lack of material resources, chronic stress) can create toxic stress for a child over time; traumatic stress occurs when a child is exposed to unpredictable event(s) that overwhelm their ability to cope, are perceived as horrifying, and leave them feeling helpless (Michaels, 2012). Both toxic or traumatic stress can lead to physiological changes in brain structure (Harris et al., 2007)

While there is increased likelihood for children in poverty to be exposed to a traumatic event, very young children in general are at increased risk for child maltreatment (Lieberman and Knorr, 2007; US Department of Health and Human Services, 2010). ***Not only is maltreatment among young children routinely unrecognized, but traumatized children are often labeled as a 'behavior problem' in childcare or school settings (Harris et al., 2007).***

Developmental Stages of Young Children

Figure 23. Number of Norwalk's Young Children by Developmental Stage (*US Census Bureau (2013-2017) ACS 5-year estimates, Table B09001)*

Infants and Toddlers	Three and Four Year Olds	Five Year Olds
3,043 (49%)	2,119 (34%)	1,056 (17%)

Of the 6,218 young children in Norwalk in 2017, 3,043 were infants and toddlers under three years old, 2,119 were three and four year old preschoolers, and 1,056 were five year olds entering kindergarten. (Fig. 23). Each of these age groups represent different developmental stages with specific milestones. Developmental milestones are things most children can do by a certain age. Children reach milestones in how they learn, speak, behave, and move (See Fig. 24). As reviewed in prior sections, many strikingly sophisticated and insightful things going on in baby's and toddlers' minds are not transparent. During preschool years, children are much more deliberate in their approach to learning and like to try things out. Still, the potential to underestimate abilities of young children persists in the preschool and kindergarten years.

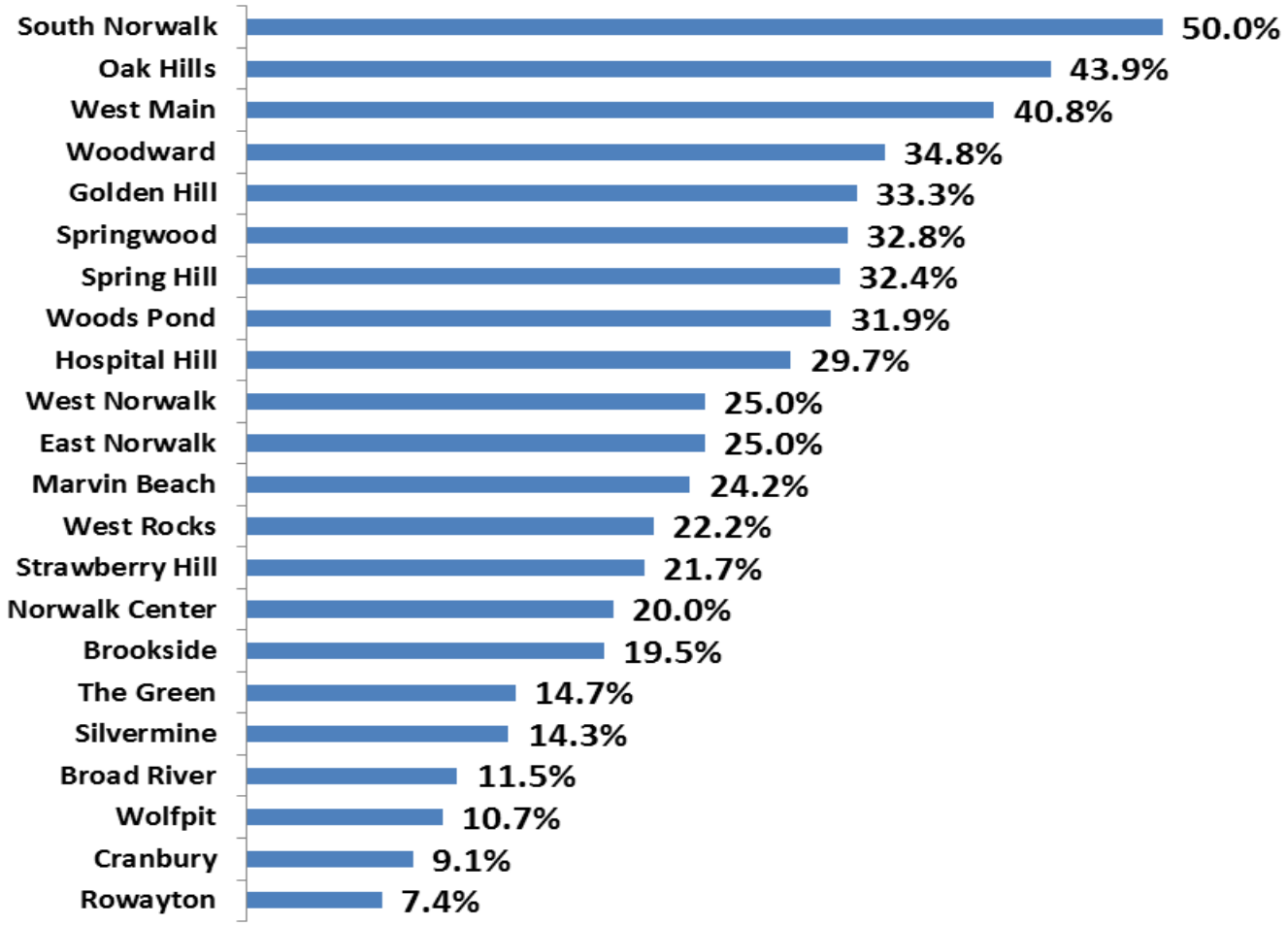
While all young children do not reach developmental milestones at the same time, development that does not happen within an expected timeframe can raise concerns. Consistent adult support across home, child care, primary health care and other service settings at each developmental time point, and cumulative adult support from one developmental time point to the next, will ensure that a child's development is optimized and any problems will be identified early. Screening can provide a quick snapshot of a child's developmental status and indicate whether further evaluation is needed. For screening to be effective, it should begin in infancy and be repeated throughout early childhood.

The Child Development Infoline (CDI) at United Way of Connecticut, offers families, pediatricians, and education and social service programs access to the Ages and Stages Child Monitoring Program. The Ages and Stages Questionnaire (ASQ-3) is a parent-friendly screening tool, endorsed by the American Academy of Pediatricians and effectively used cross-culturally (Squires et al., 2009). Through a series of screens, it can track progress between the ages of one month to 5.5 years. Results yield an on-track (above cut-off) zone and two defined at-risk zones (monitoring or below cut-off). Screening with the ASQ-3 also promotes parent's active involvement in, and understanding of, their child's development. It has been successfully used with the general population (Macy, 2012) as well as high risk populations, including in the assessment of premature and at-risk infants in public health studies, and in early childhood programs such as Early Head Start (Bagget et al., 2007; Chiu & DiMarco, 2010; Flamant et al., 2011; Henriksen et al., 2008).

Figure 24. Developmental Milestones (Centers for Disease Control and Prevention, n.d.)

Infants and Toddlers	Three and Four Year Olds	Five Year Olds
Smile for the first time Listen, reach out, explore Wave "bye-bye" Take a first step Recognize the names of familiar people and objects Form simple phrases and sentences Follow simple instructions	Take turns Express a wide range of emotions Hop on one foot Kick a ball Sort objects by shape and color Follow two- or three-step directions Imitate actions of adults and playmates Play make believe	Ride a tricycle Use safety scissors Help to dress and undress themselves Play with other children Recall part of a story Sing a song Begin to focus more on adults and children outside of their family

Figure 25. Percentage of Kindergarten Children (2019/2020 SY) By Neighborhood Who Are in Need of Developmental Monitoring or Evaluation (i.e., per screening with the ASQ-3)



The Child Development Infoline/Norwalk Early Childhood Initiative, a state-local partnership funded by the Grossman Family Foundation (2013-2021), has engaged health care providers, the city office of early childhood, the public school system, social service providers, and families, in developing a city-wide system for screening, tracking, and promoting young children's development, birth to kindergarten, using the ASQ-3. ***While the ASQ-3 is being used by Norwalk programs and agencies to monitor and promote development for individual children, it is also being used for global monitoring and assessment of all young children in Norwalk (i.e., as a population-level indicator) (Beam et al., 2015; McCoy et al., 2016).*** In partnership with Norwalk Public Schools, parents have been completing the ASQ-3 at pre-school program enrollment and at kindergarten registration since 2017. Figure 25 shows the percentage of children entering kindergarten (SY 2019-2020) by neighborhood who scored in either the monitoring zone or below the cut-off point on the ASQ-3 (i.e., indicating there might need for evaluation).

Neighborhoods with higher rates of children in need of further monitoring or evaluation also have higher concentrations of children living at or below poverty or at low income (as depicted in Fig. 1). While for the wealthier neighborhoods, the rates of children in need of further monitoring or evaluation are much lower. ***Using the ASQ-3 as a population-level indictor of child development, as well as an individual-level screen, helps guide strategic intervention and outreach at the neighborhood level.***

Services, Programs, and Supports in Norwalk for Promoting Young Children's Well-Being and School Readiness at Kindergarten

Young children's development is wholly dependent on having highly nurturing and enriching interactions with adults (i.e., 'serve and return' dialogue) that start in infancy, and are consistent and continuous from one setting/adult to the next and from one developmental touch point to the next. While it is to everyone's benefit that young children are given every opportunity to reach their full potential, experiences in children's early years lead to any number of adaptations in ability to learn, manage emotions, and interact with others. Poverty and related conditions have direct and indirect problematic effects on early brain development that can impair capacities for concentrated attention, language development, impulse control, reaction to stress, memory, and problem solving (Institute of Medicine and National Research Council, 2015).

In order for young children to be ready for school when they enter kindergarten, an important policy strategy is investing in children and families at or before birth (Doyle et al., 2009). For all children and families but especially for Norwalk's most vulnerable children and families (i.e., deeply poor, poor, or near poor households), investment and special attention are needed for the following: 1) quality prenatal and post-partum care for mothers and pediatric care for children, including regular maternal health screenings and child developmental screenings ; 2) referral and connection to essential basic needs/ safety net programs and health services as needed; 3) parenting education support; and 4) high quality child care and education.

While the entry point to needed services for children and families ideally begins prenatally or even at preconception (Robbins et al., 2014), more times than not, early identification of child and family needs happen as challenges come up or after serious problems have occurred (for example, at a pediatric visit, through a referral to a home visiting program, or when a child enters preschool or kindergarten). Similar to the state's service systems (Noonan et al., 2017), Norwalk's support and reach to young children and their families is a mixed-delivery model, a combination of public and private providers and funding sources. Figures 27 through 31 map available services, programs and supports in Norwalk for promoting children's (and families') well-being and readiness for school. These include: prenatal, birth, and pediatric health care services (Fig. 27); family and parent support programs (Fig. 28); home visiting programs (Fig. 29); and early childhood care and education programs (Figs. 30 and 31).

The array of services and early childhood systems in Norwalk involve many moving parts and a variety of settings. In keeping with Connecticut's early childhood system, program standards in Norwalk are guided by professional, policy, research, and advocacy organizations at the state and national level (Updegrove et al., 2017). Even though all early childhood professionals share the same objective of optimizing child development, the different sectors are not always perceived as a unified workforce; in fact, each has its own governance, responsibilities, budgets, positions, and regulations. ***This often creates confusion for families and providers alike who have to navigate the different systems (Institute of Medicine and National Research Council, 2015), and makes it near impossible to gain a comprehensive understanding of the child (Harris et al., 2007).***

Relative to services for three and four year old children (i.e., with established preschool programs as an entry point for other services), access to services for infants and toddlers have historically been more fragmented (Institute of Medicine and

National Research Council, 2015). Figure 26 compares the number of infants and toddlers versus preschoolers in Norwalk who receive subsidized care and education programs (i.e., a mix of state and federally funded programs including School Readiness, CDC and Care 4 Kids subsidies, each with their own eligibility criteria). While there is more than enough subsidies to meet the need for the estimated 763 preschoolers living below 200 percent FPL, subsidies available for infants and toddlers only meet 20 percent of the need (214 out of 1,095). Childcare subsidies are expensive, but for every $1.00 invested in high quality childcare for low income children, there is a return of $7.30 in future labor income, reduced crime rates, improved education, better health, and parents' labor income (Garcia et al., 2016).

While many high quality programs exist in Norwalk, no one system (e.g., primary health care), or service (home visiting) or program (preschool) is a panacea. For systems to be effective, especially for the most vulnerable young children, there has been a national "call to action" to use a collaborative approach across programs that focuses on the 'whole child' rather than separate aspects of child well-being (National Opinion Research Center, 2011). Universal approaches are being promoted as a means for making a broad impact at the population level. In other parts of the US, policy strategies focused on systems of psychosocial care that provide early and ongoing universal support for all families, including for children and families at highest risk, are having positive effects on parents and babies (Haskins et al, 2019) .

In Norwalk, the overall goal of the CDI/ Norwalk Early Childhood Initiative (2013-2022) is to ensure that young children enter school developmentally ready to learn. The initiative has been improving coordination of services across early childhood professionals and agencies through implementation of a community-wide system for screening, tracking, and promoting young children's development, using the ASQ-3 as a common screening tool. Core collaborators include Norwalk ACTS Cradle to Career Partnership, Family & Children's Agency, Mid-Fairfield Child Guidance Center, All Our Kin, Norwalk Health Department (NHD), Norwalk Early Childhood Office, Norwalk Public Schools, Connecticut's Child Development Infoline (CDI), and the University of Hartford's Center for Social Research.

Figure 26. Early Childhood care and Education: Comparing Infants and Toddlers (0-3) with Preschooler (3 and 4 Years) (Data Source: Norwalk Early Childhood Office, Norwalk School Readiness Office, CT Office of Early Childhood)

Funding Source for Early Child Care and Education	Infants and Toddlers (0-3 year olds)	Preschoolers (3 and 4 year olds)
State Funded/Accredited Child Care Programs/Slots		
School Readiness- Full Day/Full Year	--	520
School Readiness- School Day/School Year	--	96
Child Day Care (CDC) Contract	87	43
Early Head Start/Head Start	16	141
Care4Kids (Federal Funds Administered by the State)		
Children in Center Based Programs	79	76
Children in Home Based Care	32	13
Total # of Children Served (Current Capacity)	**214**	**889**
Estimated total # of children living at, below, or just above poverty level* (<200% FPL)	**1,095**	**763**
Estimated % of children living at <200% FPL who are receiving subsidized early childhood care	**20% (214 of 1,095)**	**>100%**

*Estimates were calculated using the percent of the total population under 6 years living at, below or just above poverty (36%)

Prenatal, Birth, and Pediatric Care, and Family and Parent Support Programs

Prenatal, Birth and Pediatric Care (Fig. 27).

Female reproductive health, pregnancy, and childbirth services are provided at Norwalk Hospital and two federally qualified health clinics: Norwalk Community Health Center and Day Street Community Health Center. There are also 10 pediatric offices, and 20 healthcare practitioners in Norwalk who carry a license specific to Pediatrics.

Figure 27 shows the location of the 10 pediatric offices including in Norwalk: the Center for Advanced Pediatrics, Day Street Community Health Center, East Avenue Pediatrics, Norwalk Community Health Center, Norwalk Health Department, Norwalk Hospital Park Street Pediatrics, LLC, Soundview Medical Associates, Tender Loving Care (TLC) Pediatrics, Western Connecticut Health Network Pediatric Development and Therapy Center (State of Connecticut, License Lookup, n.d.)

Basic Needs (Fig. 28):

Department of Social Services of CT
Malta House
Norwalk Housing Authority
Open Door Shelter
Person to Person
Women, Infants, and Children (WIC)
Norwalk Health Department

Family Social and Educational Services (Fig. 28):

Behavioral Health, Children and Families
Domestic Violence Crisis Center
English as Second Language (ESL)
Fox Run Family Resource Center
Norwalk Community College

Literacy (Fig. 28):

East Norwalk Library
Norwalk Public Library
Rowayton Library
South Norwalk Branch Library
Reach Out and Read CHC

Fig. 27. Prenatal, Birth, and Pediatric Care

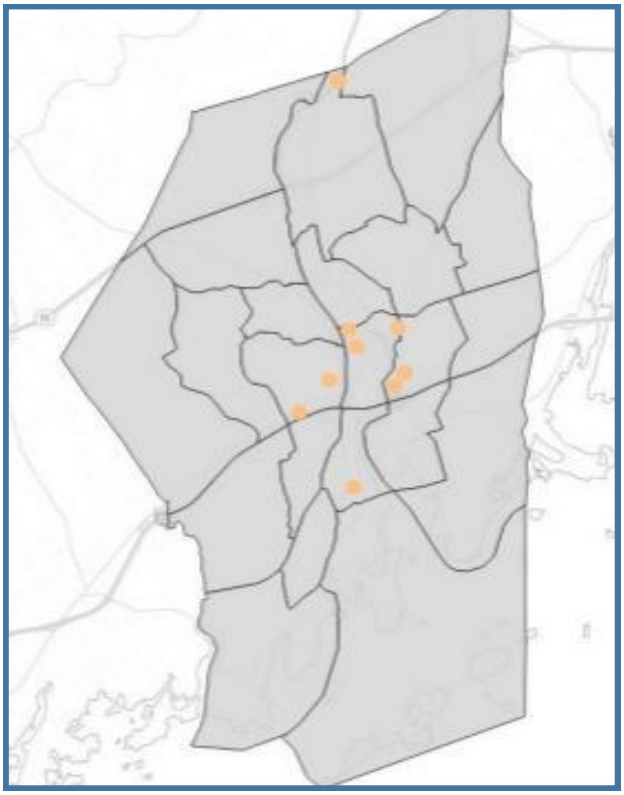
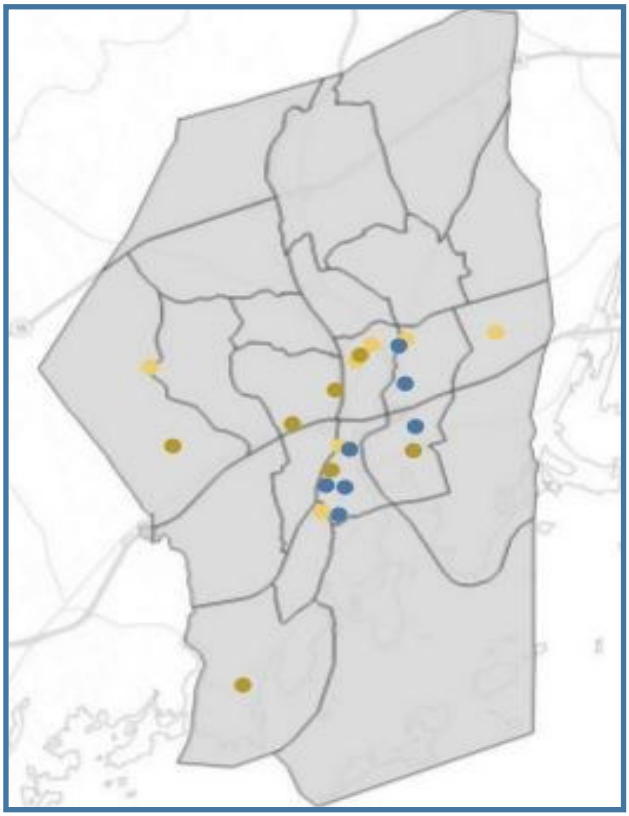


Fig. 28. Family and Parent Support Programs



Home-Based Early Childhood Programs

Home visiting for at-risk young children and their caregivers, especially mothers, is a widely disseminated prevention strategy (Duffee et al., 2017). The aim is to promote positive parenting and childrearing practices in ways that can improve children's long term outcomes. Services are provided as early as prenatally, with regular contacts as frequently as weekly, for up to three years or more. The underlying assumption is that the development of the child depends upon the parent having adequate supports, information, and internal resources to care for their child. Services include parenting education and case management support for parents' social, health, and economic needs.

Within Norwalk's home visiting programs, there is a continuum of care ranging from programs for first time parents interested in parent guidance and education, to intensive clinical supports for families who are living with mental health conditions. Norwalk is unique in that it has a single point of entry through the Child Development Infoline for all of the home visiting programs regardless of the program agency. Family referrals are triaged to the appropriate level of care based on a range of factors such as first-time parent, child/family need and/or mental health concerns.

As part of the CDI/Norwalk Early Childhood Initiative, and with additional grant support from a national StriveTogether Prenatal to 3 initiative (2018-2019), protocols have been established across all home visiting programs (from least to most intensive) for engaging parents in taking the lead in tracking their child's development (using the ASQ-3). This gives parents a common language with providers, teachers and clinicians; and promotes more intentional support of their child's development. Along with the preschool and kindergarten ASQ-3 data, the home visiting ASQ-3 data are stored in a single repository that allows for monitoring progress over time, ensures continuous and consistent effort toward milestones, reduces risk of developmental delay. However, Norwalk's home visiting programs are currently providing services for 170 families with infants and toddlers. Given the estimated 1,095 infants and toddlers who are living below 200 percent FPL, this is only meeting 15 percent of the need.

Figure 29. Home Visiting Programs

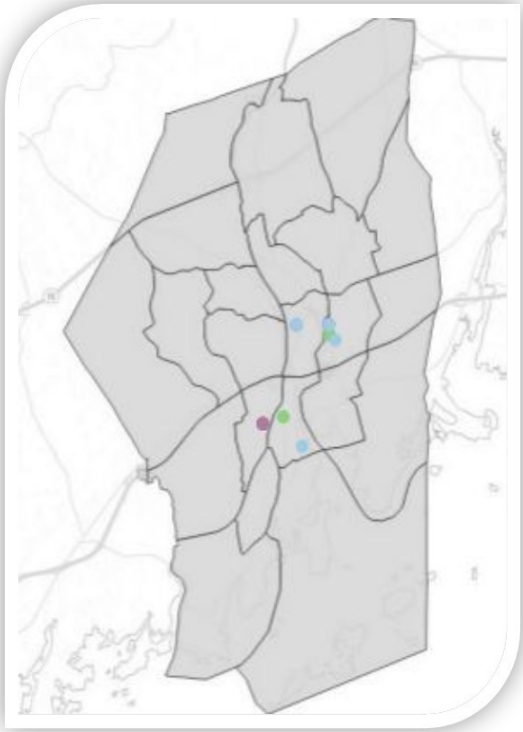


Figure 29 locates the agencies that provide 1) child development and support services, 2) early intervention services for children ages birth to three with a diagnosed developmental delay, and 3) home visiting services for parents of young children (as color-coded and listed below).

Child Development Services
Child Guidance Center of Mid-Fairfield
Family and Children's Agency;
Norwalk Early Childhood Office

Early Intervention
Star Rubino Center, Inc.; Theracare

Home Visiting Services for Parents of Young Children
Child First (Child Guidance Center)
Minding the Baby (FCA)
MOMS (FCA)
Parents as Teachers (FCA)
The Fatherhood Initiative (FCA)

Early Childhood Care and Education Programs

Figure 30 shows a map of Norwalk's publicly and privately funded early childhood center-based programs, and Figure 31 shows Norwalk's home-based early childhood programs. The majority of the publicly funded center-based programs and home-based services are centrally located. Comparatively, there are much fewer privately-funded center-based programs, and about half of them are spread around the outskirts in wealthier areas. Some of the home-based services are also in Norwalk's outskirts.

Using Nobel Prize-winner economist James Heckman's cost-benefit formula on the long-term effects of quality early childhood care for low-income families (Garcia et al., 2016), Noonan and others (2017) at Connecticut Voices for Children showed just how much high-quality child care boosts the state's economy: Per the Heckman Equation (2010), for every $1.00 investment in high-quality care, there is a $7.30 return in improved employment for parents, and improved educational, behavioral, health and economic outcomes over the course of children's lives. In 2017, there were 5,232 Connecticut infants and toddlers receiving high-quality care (i.e., state accredited) and 21,272 preschool children. With cost per infant/toddler and preschooler estimated at $14,079 and $11,699, respectively, the long-term benefit for the state was $2,349,840,545. (i.e., calculations for infants (5,232 * $14,079*$7.30=$537,727,694) plus preschoolers (21,273 * $11,699 *$7.30 = $1,812,112,850)). However CT families' need for child care is far more than available slots that, if were available (i.e., funded), would give an additional $13.38 billion in return to the state (using same formula).

In Norwalk, there are an estimated 1,095 infants and toddlers who are living below 200 percent FPL, and there are 214 low-income children receiving subsidized child care (see Fig. 26). Using the same above formula, at a cost of $14,079 per infant/toddler (assuming high quality care) and $7.30 for every $1.00 spent, *we gain a return of $21,994,214*, while for the estimated 881 children who are at <200 percent FPL and not receiving subsidized care, *this would give a, additional return of $90,546,273*.

Publicly funded Center-Based Programs (Fig 30)
Private Funded Center-Based Programs

Home-Based Early Childhood Programs (Fig 31)

References

Abrams, L. S., Dornig, K., & Curran, L. (2009). Barriers to service use for postpartum depression symptoms among low-income ethnic minority mothers in the United States. Qualitative Health Research, 19(4), 535-551.

Almond, P. (2009). Postnatal depression: a global public health perspective. Perspect Public Health, 129 (5), 221-227.

Allen, L. & Kelly, B. (2015). Transforming the Workforce for Children Birth Through Age 8: A Unifying Approach. Institute of Medicine and National Research Council. Washington DC: National Academies Press.

Ammerman, R., Putnam, F., Bosse, N., Teeters, A., and Van Ginkel, J. (2010). Maternal Depression in Home Visitation: A Systematic Review. Aggress Violent Behav., 15(3): 191–200.

Ammerman, R. T., Putnam, F. W., Altaye, M., Chen, L., Holleb, L. J., Stevens, J., Van Ginkel, J. B.(2009). Changes in depressive symptoms in first time mothers in home visitation. Child Abuse Negl, 33(3), 127-138.

Baggett, K., Warlen, L., Hamilton, J., Roberts, J., & Staker, M. (2007). Screning infant mental health indicators: An Early Head Start initiative. Infants & Young Chidlren, 20(4), 300-310.

Bagner, D. M., Pettit, J. W., Lewensohn, P. M., & Seeley, J. R. (2010). Effects of maternal depression on child behavior: A sensitive period? Journal of the American Academy of Child and Adolescent Psychiatry, 40, 699-707.

Beam, Maria, Kaiser, A., Pare, E., Schellenbach, C., & Murphy M. (2015).Early developmental screening in high-risk Communities: Implications for research and child welfare policy. The Advanced Generalist: Social Work Research Journal, 1 (3/4), p 18-36.

Buchanan, M. & Abraham, M. (2015). Concentrated Wealth and Poverty in Connecticut's Neighborhoods. Retrieved from: https://www.ctdatahaven.org/reports/concentrated-wealth-and-poverty-connecticuts-neighborhoods

Cauthen, Nancy K.; Fass, Sarah. (2008). Measuring Income and Poverty in the United States. New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.

Child Trends. (2018). The Prenatal-to-Three Outcomes Framework Data Guidebook. Retrieved from https://www.thencit.org/sites/default/files/2018-12/Prenatal-to-Three%20Data%20Guidebook_0.pdf

Chiu, S. & DiMarco, M. (2010). A pilot study comparing two developmental screening tools for use with homeless children. Journal of Pediatric Health Care: Official Publication of National Association of Pediatric Nurse Associates & Practitioners, 24(2), 73-80.

Centers for Disease Control and Prevention (n.d.). Positive Parenting Tips. Retrieved from: https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/index.html

Center on the Developing Child at Harvard University (2009). Maternal Depression Can Undermine the Development of Young Children: Working Paper No. http://www.developingchild.harvard.edu.

Child Trends. (2016). Dual Language Learners. Retrieved from https://www.childtrends.org/indicators/dual-language-learners

Connecticut Department of Public Health (2015). Prenatal and Birth Vital Statistics.

Crockenberg, S. C., & Lekes, E. M. (2003). Parental acceptance, post-partum depression, and maternal sensitivity: Mediating and moderating processes. Journal of Family Psychology, 17, 80-93.

Cuddy, E., Vebator, J., Reeves, R. (2015). In a Land of Dollars: Deep Poverty and Its Consequences. Washington, DC: The Brookings Institute. Retrieved from https://www.brookings.edu/research/in-a-land-of-dollars-deep-poverty-and-its-consequences/

Dalaker, J., Falk, G., & McCarty, M. (2016). Demographic and Social Characteristics of Persons in Poverty. Washington, DC: Congressional Research Service.

Doyle, O., Harmon, C., Heckman, J., & Tremblay, R. (2009). Investing in early human development. Econ Hum Biol., 7(1), 1-6.

Duffee, J. H., Mendelsohn, A. L., Kuo, A. A., Legano, L. A., Earls, M. F., & Committee on Child Abuse and Neglect. (2017). Early childhood home visiting. Pediatrics, 140(3), e20172150.

Edin, K., Boyd, M., Mabli, J., Ohls, J., Worthington, J, Greene, S. et al., (2013). SNAP Food Security In-Depth Interview Study. Cambridge, MA: Mathematica Policy Research.

Ekono, M. Jiang, Y., Smith, S. (2016). Young Children in Deep Poverty. New York: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.

Essex, M. J., Klein, M. H., Miech, R., & Smider, N. A. (2001). Timing of initial exposure to maternal major depression and children's mental health symptoms in kindergarten. The British Journal of Psychiatry, 179 (2), 151-156.

Fairbrother, H., Curtis, P., & Goyder, E. (2012). Children's understanding of family financial resources and their impact on eating healthily. Health Soc Care Community, 20(5), 528-536.

Field T. (1992). Infants of depressed mothers. Developmental Psychopathology, 4, 49-66.

Flamant, C., Branger, B., Tich, S., Rocheborchard, E., Savagner, C., et al. (2011). Parent-competed developmental screening in premature children: A valid tool fopr follow-up programs. PloSONE, 6(5), e2004.

Forman, D., O'Hara, M., Stuart, S., Gorman, L., Larsen, K., & Coy, K. (2007). Effective treatment for postpartum depression is not sufficient to improve the developing mother child relationship. Development and Psychopathology 19, 585-602.

Garcia, E. & Weiss, E. (2017). Education inequalities at the school starting gate. Washington, DC: Economic Policy Institute.

Garcia J., Heckman, J., Erminileaf, D., Prados, M. (2016). The Life-Cycle Benefits of an Influential Early Childhood Program. Cambridge, Mass: National Bureau of Economic Research.

Greater Norwalk Region (2016). Community Health Needs Assessment and Priorities. Retrieved from https://www.norwalkct.org/DocumentCenter/View/11296/2016-Greater-Norwalk-Community-Health-Assessment?bidId=

Guzman, G. (2018). Houshold Income: 2017. Retrieved from the US Department of Commerce Economics and Statistics Administration, US Census Bureau. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2018/acs/acsbr17-01.pdf

Harris, W., Lieberman, A., & Marans, S. (2007) In the best interests of society. Journal of Child Psychology and Psychiatry, 48(4), 392-411.

Hay, D. F., Pawlby, S., Angold, A., et al. (2003) Pathways to violence in the children of mothers who were depressed postpartum. Developmental Psychology, 39, 1083– 1094.

Heckman, James et al. (2010). A New Cost-Benefit and Rate of Return Analysis for the Perry Preschool Program: A Summary. Cambridge, MA: National Bureau of Economic Research Working Paper Series.

Henriksen, C., Haughalt, K., Lindgren, M. Aurvag, A., Ronnestad, A., Gronn, M. et al. (2008). Improved cognitive developmental among preterm infants attributatble to early supplementation of human mild with docosahexaenoic acid and arachidonic acid. Pediatrics, 121(6), 1137-1145.

Hernandez, D. (2011). Double jeopardy: How Third Grade Reading Skills and Poverty Influence High School Graduation. Baltimore: Annie E. Casey Foundation.

Hiller, A. (2007). Why social work needs mapping. Journal of Social Work Educaiton, 43(2), 205-221.

Hirai A., Sappenfield, W., Kogen, M., Barfield, W., Goodman, D., Ghandour, R., Lu, M. (2014). Infant Mortality Data Summary Report for Region 1. Rockville, MD: Maternal and Child Health Bureau, Health Resources and Services Administration.

Institute of Medicine (2007). Preterm Births: Causes, Consequences, and Prevention. Washington, CD: National Academies Press.

Institute of Medicine and National Research Council (2015). Transforming the Workforce for Children Birth through Age 8: A Unifying Foundation. Washington, DC: The National Academies Press.

Jiang, Y. Granja, M., & Koball, H. (2017). Basic Facts about Low-Income Children. New Your: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.

Klaus-Stevens, Frost, Carey, & Karanda, (n.d.) One Key Question and the Every Woman Connecticut Learning Collaborative. Hartford, CT: Department of Mental Health and addiction Services, Office of Workforce Development.
Koniak-Griffin, D. (1993). Maternal role attainment. Journal of Nursing Scholarship, 25, 257-262.

Lei, S. (2013). The Unwaged War on Deep Poverty. Washington, DC: Unban Institute.

Leventhal, T and Brooks-Gunn, J. (2003). Moving to opportunity: An experimental study of neighborhood effects on mental health. American Journal of Public Health, 93 (9), 1576-1582.

Lieberman, A. & Knorr, K. (2007). The impact of trauma: A developmental framework for infancy and early childhood. Psychiatric Annals, 37(6) 416-422.

McCoy, D., Black, M., Daelmans, B., & Dua, T. (2016). Measuring development in children from birth to age 3 at population level. Early Childhood Matters. The Hague, The Netherlands: Bernard Van Leer Foundation.

Mercer, R. T. (2014). Becoming a mother versus maternal role attainment. Journal of Nursing Scholarship, 36 (3), 226-232.

Michaels, C. (2012). The impact of Trauma on Infants. University of Minnesota Extension: Child Welfare Series. Retrieved from: https://drive.google.com/file/d/16DsorwzpLX_jcbeUaLM__62jT4-bwZB5/view

Migration Policy Institute. (2015). MPI Releases Detailed Data Profiles of Unauthorized Immigrants and Estimates of Deferred Action Populations for Top U.S. Counties. Retrieved from: https://www.migrationpolicy.org/news/mpi-releases-detailed-county-profiles-unauthorized-immigrants-and-estimates-deferred-action

National Academics of Sciences, Engineering, and Medicine. (2015). Community Mapping Discussion Guide for Birth Through 8 Stakeholders. Retrieved from https://www.nap.edu/resource/19401/birth-to-8_manual.pdf

National Partnership for Women and Families (2019). Tackling Maternal health Disparities: A Look at Four Local Organizations with Innovative Approaches. Washington, DC. Retrieved from http://www.nationalpartnership.org/our-work/resources/health-care/maternity/tackling-maternal-health-disparities-a-look-at-four-local-organizations-with-innovative-approaches.pdf

Nolan, B. (2019). Voice's Blog: What is Deep Poverty Anyway? Retrieved from: https://vakids.org/our-news/blog/what-is-deep-poverty-anyway

Noonan, R., Updegrove, N., Long, D. (2017). The Economic Benefits of High-Quality Early Care. New Haven, CT: Connecticut Voices For Children.

O'Hara M.W. (1997). The nature of postpartum depressive disorders. In: Murray L, Cooper PJ, editors. Postpartum Depression and Child Development. New York: Guilford; 1997. pp. 3–31.

Office of Public Housing and Research (n.d.). Assisted Housing: National and Local. Retrieved from: https://www.huduser.gov/portal/datasets/assthsg.html

Pearson, R. M., Evan, J., Kounali, D., Lewis, G., Heron, J., Ramchandani, P. G., & Stein, A. (2013). Maternal depression during pregnancy and the postnatal period: risks and possible mechanisms for offspring depression at age 18 years. JAMA Psychiatry, 70(12), 1312-1319.

Pew Research Center: Hispanic Trends (2019). Estimates of US unauthorized immigrant population, by metro area, 2016 and 2007. Retrieved from: https://www.pewresearch.org/hispanic/interactives/unauthorized-immigrants-by-metro-area-table/

Quint, J., Griffin, K., Kaufman, J., & Landers, P., with Utterback, A. (2018). Experiences of Parents and Children Living in Poverty: A Review of the Qualitative Literature. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children

and Families, US Department of Health and Human Services.

Ratcliffe, C. (2015). Child Poverty and Adult Success. Washington, DC: Urban Institute.
Ratcliffe, C. & McKernan, S. (2010). Childhood poverty persistence: Facts and consequences. Washington, DC: Urban Institute.

Robbins CL, Zapata LB, Farr SL, et al. (2014).Core State Preconception Health Indicators - Pregnancy Risk Assessment Monitoring System and Behavioral Risk Factor Surveillance System, 2009. MMWR Surveillance Summaries, 63(SS-3): 1-61. Atlanta, GA: Centers for Disease Control and Prevention.

Rubin, K., Coplan, R. Bowker, J. (2009). Social withdrawal in childhood. Annu Rev Psychol, 60, 141-171.

State of Connecticut. (n.d.) License Lookup: Search for License, Permit, Certification, or Regisration. Retrieved from:, https://www.elicense.ct.gov/Lookup/GenerateRoster.aspx)

Shutts, K., Brey, E., Dornbusch, L., Slywotzky, N., Olson, K. (2016). Children Use Wealth Cues to Evaluate Others. PLos ONE 11(3).

Skinner, C., Wight, V. R., Aratani, Y., Cooper, J., & Thampi, K. (2010). English Language Proficiency, Family Economic Security, and Child Development. New Your: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.

Sorenson Impact (2018). The Community Profile tool. Salt Lake City, Utah: David Eccles School of Business, University of Utah.

Updegrove, N., Noonan, R., Long, D. (2017) Assessing Quality in Connecticut's Early Childhood System. New Haven, CT: Connecticut Voices For Children.

United States Census Bureau. (2018). American Community Survey 5-Year Data (209-2017) Retrieved from: https://www.census.gov/data/developers/data-sets/acs-5year.2016.html

United States Census Bureau. (2018). Understanding and Using American Community Survey Data: What All Data Users Need to Know. Retrieved from: https://www.census.gov/content/dam/Census/library/publications/2018/acs/acs_general_handbook_2018.pdf

United States Census Bureau (2018). Hispanic Origin. Retrieved from: https://www.census.gov/topics/population/hispanic-origin/about.html

United States Census Bureau (2019). Language Use: Frequently Asked Questions. Retrieved from: https://www.census.gov/topics/population/language-use/about/faqs.html

United States Census Bureau (2019). How the Census Bureau Measures Poverty. Retrieved from: https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html

US Department of Health and Human Services, Administration for Children and Families. Administration on Children, Youth and Families, Children's Bureau. (2010). Child Maltreatment report 2010. Retrieved from: http://www.ncdsv.org/images/HHS-Children%27sBureau_ChildMaltreatment2010.pdf

Weissman, M.M, Pilowsky, D.J., Wickramaratne, P.J., Talati, A., Wisniewski, S.R., Fava, M., et al. (2006). Remissions in maternal depression and child psychopathology. Journal Essex et al., 2001; O'Hara, 1997Of American Medical Association, 295, 1389-1398.

Zero To Three (2016). Infant-Early Childhood Mental Health. Retrieved from: https://www.zerotothree.org/resources/110-infant-early-childhood-mental-health