



## Head Start California: Head Start Programs in California Serve Thousands of Low-Income Children and Families, but Challenges Remain

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#### **EXECUTIVE SUMMARY**

Since 1965, Head Start has provided critical early care and education (ECE) programming for low-income children ages 0-5 in the United States to address significant disparities in health, education, and employment outcomes. However, access and knowledge barriers prevent many eligible children from receiving these federally subsidized services. These barriers are particularly prominent in the state of California. California counties have high rates of child poverty to the extent that children eligible for Head Start programming outnumber available slots statewide by a magnitude greater than four.

Moreover, the recent introduction of categorical eligibility to include CalFresh recipients doubles this disparity. Following a memorandum issued by the Office of Head Start in April 2022, recipients of federal food assistance are categorically eligible for Head Start programs, which includes households who earn up to 200% FPL in California. With this recent change in eligibility, the nonprofit organization Head Start California has an opportunity to address access and knowledge barriers that persist for low-income households of color and ensure that the program's expansion of categorical eligibility achieves more equitable outcomes.

#### The Client

This project was conducted in partnership with Head Start California (abbreviated as "HSC" or "the client"). HSC is a nonprofit organization in Sacramento, CA that serves all Head Start program sites located within the state of California. The client's key activities include sharing information between and across program sites, providing networking and professional development opportunities for program site staff, and conducting advocacy on behalf of policies that benefit program sites. The client engaged the USC project team to conduct research on the extent of a mismatch between supply and demand for Head Start services across the state of California. The client also requested that the project team test the hypothesis that Head Start is a "well-kept secret" among eligible households residing in California.

#### Methodology

The project team deployed two primary methods of analysis to conduct this research: 1) spatial analysis of a mapping product built in ArcGIS, and 2) descriptive and statistical analysis of survey responses collected in Qualtrics and analyzed using STATA and Tableau. Spacial analysis focused on quantifying the mismatch between supply and demand of Head Start services and assessing the extent of physical access barriers by county and by census tract. The mapping product employed American Community Survey (ACS) data as well as program site and enrollment data from the client to generate supply and demand estimates. Meanwhile, the survey collected data on Head Start knowledge as well as decision-making factors in early care and education (ECE) for parents and guardians of young children. The survey product was deployed following IRB approval and distributed to parents and guardians in California with support provided by several survey distribution partner organizations.

#### **Spatial Analysis**

Head Start program sites are unevenly distributed across California counties and census tracts, offering inequitable access to populations most in need of these federally subsidized services. Whereas some counties have a close match between estimated demand and supply of Head Start

services, other counties have significant gaps whereby children between the ages of zero and five must compete for relatively few enrollment slots in their area. Many counties sustained these gaps in supply and demand prior to the categorical eligibility of CalFresh recipients, whereby this recent expansion of eligibility poses even greater problems of inequitable access.

#### **Survey Analysis**

Overall, Head Start does not appear not a "well-kept secret" according to the survey responses collected from parents and guardians in California. A large majority of respondents reported having reported having heard of Head Start, with a majority learning about the program through social network sites. However, knowledge disparities emerged along indicators of race/ethnicity, poverty status, geographic area, and state region. For example, white respondents, respondents living below 200% of the federal poverty level (abbreviated as "200% FPL"), respondents in rural counties, and respondents in northern California reported higher levels of familiarity with Head Start. Program quality emerged as the most important factor for choosing an ECE program, again some differences based on the four previously described indicators. While a majority of families are familiar with Head Start, the client nonetheless has an opportunity to address inequities in program knowledge with the recent expansion of categorical eligibility.

#### **Implications and Recommendations**

Overall, the estimates for demand for Head Start (number of eligible children) outstrips the supply (Head Start spots) by a magnitude greater than eight with the recent expansion of categorical eligibility to include CalFresh recipients. The gap between demand and supply was greater in rural counties versus their urban counterparts. Head Start locations are also unevenly distributed in some counties, offering inequitable access to eligible children. Some recommendations informed by the spatial analysis include sharing these findings with program sites and conducting additional spacial analysis of supply of other ECE programs in California, such as transitional kindergarten, to understand how alternatives impact inequities in and competition for Head Start program access.

While the survey data is not representative of all families with young children living in California, many steps were taken to reach a diverse sample of respondents and remove illegitimate responses. Therefore, given the differences that emerged in this sample based on race/ethnicity, poverty status, geographic area and state region, this survey analysis sheds some light on where additional steps can be taken to address inequities in program knowledge. Some recommendations for the client include making a greater effort to reach eligible families of color, leveraging social networking sites more often for promotional purposes, and administering parental surveys on a semi-regular basis.

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#### I. ISSUE OVERVIEW

In California, many children and families living in or near poverty are unable to access the early care and education (ECE) services needed for school readiness. ECE programs, including Head Start, are not providing services to all families in need throughout the state. Head Start is a federal ECE program established in 1965 that provides school readiness and wellbeing services for preschool children, toddlers, and infants of low-income families. In fiscal year 2019, an estimated 122,000 low-income children were served (California Department of Education, 2022). However, estimates suggest that there are nearly 650,000 children eligible for a subsidized ECE program, many of whom do not have access (Melnick et. al, 2017). These estimates suggest that California's ECE programming, including Head Start programs, fall far short of servicing eligible families in California. Possible explanations include a paucity of service sites and lack of information available to families eligible for ECE services. As such, it is likely that hundreds of thousands of low-income families and children in California are missing out on valuable subsidized services that contribute to child development. Head Start, for example, promotes school readiness by providing programs for early learning and development, health and well-being, and family well-being and engagement to address systemic socioeconomic barriers that low-income children face to reduce gaps in long-term educational outcomes (Head Start Services, 2022). Students enrolled in subsidized ECE programs, such as Head Start, have shown to have better educational outcomes, such as graduating high school and attending college, as well as improved social-emotional development (Deming, 2009; Yoshikawa et al., 2013; Melnick et al., 2017; Garces et al., 2002; Cooper & Lanza, 2014; Barnett, 1995; Duncan et al., 2011; and U.S. HHS, 2010).

#### **Poverty in California**

Too many children live in poverty in California, although estimates vary. The U.S. Census Bureau estimated that approximately 12.3 percent or nearly 4.75 million Californians are living in poverty as of 2021 (U.S. Census Bureau, 2021).<sup>1</sup> Of those Californians in poverty, a little over 330,000 are young children under 5 years (U.S. Census Bureau, 2021). According to U.S. Census Bureau estimates, California has the second most children under 5 years living in poverty in the U.S. (see Figure 1.1).<sup>2</sup> A recent study by the Public Policy Institute of California (PPIC), which estimates poverty using a different method, suggests that as many as 4.5 million Californians are living in poverty, as of 2021 (Danielson et al., 2022a).<sup>3</sup> Of those Californians in poverty, the PPIC estimates that 8.4 percent or approximately 378,000 are young children under 5 years, an increase of 14.5 percent compared to the U.S. Census Bureau estimate (Danielson et al., 2021).

<sup>&</sup>lt;sup>1</sup>This estimate is the U.S. Census Bureau's official poverty measure of the 2021 American Community Survey, 1-year estimates of poverty status in the past 12 months (S1701). Of the nearly 4.75 million Californians estimated to live in poverty, approximately 1.4 million are children under the age of 18 (U.S. Census Bureau, 2021). <sup>2</sup>According to U.S. Census Bureau estimates. Texas has the most children under 5 living in poverty.

<sup>&</sup>lt;sup>3</sup>The Public Policy Institute of California conducted this study in partnership with the Stanford University Center on Poverty and Inequality in the fall of 2021 using a California Poverty Measure. This measure estimates the level of poverty in California by accounting for the differing costs of living and government subsidies (Danielson et al., 2022a). This measure's poverty line is approximately \$36,900 per year for a family of four (Danielson et al., 2022a). The PPIC utilizes the California Poverty Measure, which examines poverty more comprehensively and accounts for different factors such as geographical differences in the cost of living, social safety nets like Cal Fresh, and childcare expenses (Bohn et al., 2013).

al., 2022b).<sup>4</sup> While these estimates are declining due to increased availability of social safety nets, according to the PPIC, the number of children living in poverty is still great.<sup>5</sup>

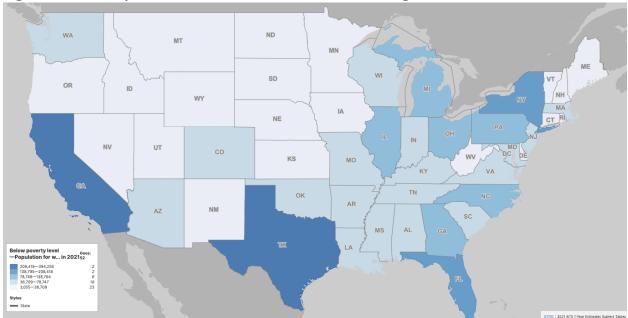


Figure 1.1: Poverty of Children Under 5 Years in the Contiguous U.S.

Source: U.S. Census Bureau Map of American Community Survey, 1-Year Estimates (S1701)

Of those Californians in poverty, there is a large proportion of Californians that are educationally disadvantaged and unemployed. According to U.S. Census Bureau estimates, nearly 20 percent of Californians below the poverty level have no high school diploma and nearly 25 percent are unemployed (see Figure 1.2).<sup>6</sup> Racial disparities in poverty status also continue to persist within the state. According to U.S. Census Bureau estimates, nearly 20 and 15 percent of California's population below poverty level are Black or African American and Hispanic or Latino, respectively (see Figure 1.2). While African Americans represent a relatively small percentage of the California's population (5 percent), they make up almost 10 percent of the bottom 10 percent of the income distribution; Black and Latino families combined make up almost 60 percent of the bottom ten percentile (Bohn et al., 2022). Conversely, white families make up about 39 percent of the population, while accounting for over 64 percent of the top 10 income percentile (Bohn et al., 2022). Latino and Black children are more likely to live in poverty as compared to white children and children of other races (Kids Data, 2021).

<sup>&</sup>lt;sup>4</sup>According to the Public Policy Institute of California's measure, approximately 9 percent or 405,000 Californians in poverty are children aged 0-17. Of the 9 percent, 8.4 percent are aged 0-5 (Danielson et al., 2022b).

<sup>&</sup>lt;sup>5</sup>The Public Policy Institute of California reported rates in California dropping to 9 percent in the fall of 2021 from 17.9 percent in 2019 (Danielson et al., 2022a).

<sup>&</sup>lt;sup>6</sup>These estimates are not mutually exclusive. The working-age category includes the population below poverty level 18 to 64 years. The educational attainment category includes the population below poverty level 25 years and over. The employment status categories includes the population below poverty level 16 years and over.

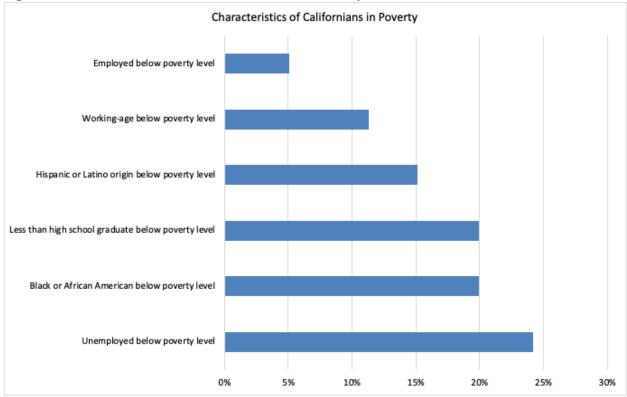


Figure 1.2: Characteristics of Californians in Poverty

Source: Analysis of U.S. Census Bureau American Community Survey, 1-Year Estimates (S1701)

#### **Poverty Outcomes**

The outlook for young children living in poverty is grim. A study on the importance of early childhood poverty suggests that poor children begin their K-12 education behind their classmates from more affluent backgrounds and that many lose ground during their academic careers (Duncan et al., 2011). This suggests that poorer children already not at the same level of preparedness for school are continuously outperformed by their affluent classmates over time as education disparities widen further. One study finds that young, low-income children are vulnerable to educational disparities from as early as 9 months old (Meloy et al., 2019). The different experiences that low-income children have compared to their more affluent peers can lead to great disparities in their cognition and preparation for education (Meloy et al., 2019).

A number of challenges emerge for low-income children as a result of their socioeconomic status. For example, low-income preschool-aged children in the U.S. have, on average, lower levels of reading and math abilities, and go on to attain less education than their more affluent peers (Duncan et al., 2011). The same study suggests that poverty is associated with several other disadvantages, such as little to no parental education and living in a single-parent household (Duncan et al., 2011). Research suggests that children from socioeconomically disadvantaged backgrounds achieve less in school (lower graduation rates), demonstrate more problematic behaviors, and tend to be less healthy compared to children from more affluent backgrounds (Duncan et al., 2011; Meloy et al., 2019; Brooks-Gunn & Duncan, 1997). These impacts matter in the long term. For example, early poverty is predicted to have negative compounding effects on adult earnings (Duncan et al., 2011). Disparities follow disadvantaged children throughout

their lives, leading to shortcomings in education, health, and future earnings unless there are ECE interventions early in their lives (Meloy et al., 2019).

Children who are poor are also likely to live in neighborhoods of concentrated poverty, which can also harm their development (Shapiro et al., 2015). In 2001, the U.S. Department of Housing and Urban Development administered a randomized control trial with federal housing choice vouchers and determined that boys whose families were not restricted to impoverished neighborhoods (i.e., the experiment group) experienced fewer behavior problems and expressed fewer safety concerns (Shroder, 2001). Another study examining the Moving to Opportunity experiment found that students that were part of the experiment group who were young (below 13) had positive long-term effects, such as higher college attendance rates and income (Chetty et al., 2015).

#### **Opportunity Gap**

Minority and low-income students in our education field continue to have less access to the necessary resources to perform well academically and create a successful future (Close the Gap Foundation, 2023). This phenomenon is known as the opportunity gap, which is defined as "the way uncontrollable life factors like race, language, economic and family contributions can contribute to lower rates of success in educational achievement, career aspirations" (Close the Gap Foundation, 2023).<sup>7</sup> A report released in 2012 found that "22 percent of children who have lived in poverty did not graduate from high school compared to 6 percent of non-poor students" (Hernandez, 2012). In California, test scores for Latino and Black students continue to lag behind their white peers. In 2022, for example, a large majority of black students (84 percent) and Latino students (79 percent) did not meet the state math standards, while 52 percent of white students did not meet the standard (Esquivel & Blume, 2022). Black and Latino students are less likely to graduate from high school, more likely to be suspended, and more likely to experience chronic absenteeism (California Department of Education, 2023). This opportunity gap begins early, before kids even start school. Studies have shown that Black students enter kindergarten with fewer math and reading skills (Henry et al., 2020). The early years of a child's life are crucial to their development, and quality ECE can be a means of closing the gap.

#### **Outcomes of ECE Interventions**

Education can be a positive driver out of poverty for low-income children. For young children in particular, quality ECE can lead to several positive effects that prompt more success later in life, including improved mathematic skills, language, and literacy among other competencies (Melnick et al., 2017). Yet children from disadvantaged backgrounds face greater difficulties in attaining quality ECE, which is likely unaffordable for the average family living in or near poverty (Melnick et al, 2017).<sup>8</sup> Fortunately, means-tested ECE programs can help fill this need. Literature indicates that subsidized ECE programs, such as Head Start, can have positive outcomes for low-income children, and help children overcome socioeconomic disparities in mathematics and literacy (Barnett, 1995; Deming, 2009; and Duncan et al., 2011). Such ECE programs are important because they occur during the early years of a child's life, when they are

<sup>&</sup>lt;sup>7</sup>In line with current language trends seen in the field of educational disparities, we use "opportunity gap" rather than "achievement gap" because the latter implies fault at the individual rather than systems level.

<sup>&</sup>lt;sup>8</sup>Melnick et al. argue that for poor families, childcare costs can take up to 50 percent of household income, especially for a household with a single parent earning a low wage (2017).

most susceptible to intervention (Yoshikawa et al., 2013). These early interactions turn into the building blocks for skills developed in young adulthood and beyond (Yoshikawa et al., 2013).

Literature on the outcomes of ECE interventions for low-income children show that participants experience increased levels of education completion, reduced crime, and higher earnings, among other beneficial outcomes (Deming, 2009; Yoshikawa et al., 2013; Melnick et al., 2017; Garces et al., 2002; Cooper & Lanza, 2014; Barnett, 1995; and U.S. HHS, 2010). Head Start directly targets children's health and has shown improvements in the health of pre-school aged children in low-income families. For instance, Head Start has shown increases in child immunization rates due to the program's efforts (Yoshikawa et al., 2013).<sup>9</sup>

Participants of Head Start gain benefits that persist into adulthood (Garces et al., 2002). Outcomes, however, differ across cultural and racial groups. For example, white participants of Head Start could experience an increased likelihood of finishing high school and attending college and earning more in early adulthood (Garces et al., 2002). African American participants of Head Start experience a reduced likelihood of being involved in crime and a greater likelihood of completing high school (Garces et al., 2002).<sup>10</sup> A study showed that Head Start participants scored higher levels than their peers in vocabulary when measured at the end of the program (Cooper & Lanza, 2014).<sup>11</sup> A study conducted by the U.S. Department of Health and Human Services on Head Start found that benefits for participants were primarily in language and literacy areas (2010).

Education is a vital tool in the fight against childhood poverty. Access to quality education is seen globally as a remedy to the cycle of poverty because the more education a person receives on average, the higher their lifetime income tends to be (Giovetti & McConville, 2022; Wolla & Sullivan, 2017). In other words, higher educational attainment predicts reduced likelihood of living in poverty (Danielson et al., 2021). Education is seen as a great equalizer, potentially lifting children out of poverty into adulthood. At the same time, students are not receiving equal education opportunities, and an opportunity gap exists.

#### **ECE** Complexity in California

California's ECE system can be described as a "patchwork of programs" with many providers offering the same services to the same intended audience (Melnick et al., 2017). Because Head Start directly funds service providers, bypassing state and local governments, other ECE program administrators and decision makers are largely out of touch with Head Start programs statewide. There is no centralized entity that monitors the numbers of eligible children for these programs or their enrollment. California's siloed approach to ECE programs prevents decisionmakers from determining (1) whether there is a match of service providers for the needs and (2) the overall expenditures on ECE (Melnick et al., 2017). For example, excluding Head Start when assessing service needs in the state could skew the results of ECE supply and expenditures (Melnick et al., 2017). This complexity riddles ECE programs across the nation. The U.S. Government

<sup>&</sup>lt;sup>9</sup>Head Start also offers comprehensive health screenings and dental care, among other services (Yoshikawa et al., 2013).

<sup>&</sup>lt;sup>10</sup>The finding for African Americans' greater likelihood to complete high school is for males in comparison to their siblings (Garces et al., 2002).

<sup>&</sup>lt;sup>11</sup>This finding compared Head Start participants to peers that did not participate in the same program.

Accountability Office (2019) studied federal and state ECE programs nationwide and found that "69 state preschool programs offered at least one of the same services as Head Start or prioritized at least one of the same groups of children for enrollment."

The challenge of meeting demand for ECE programs in California is further complicated by policy changes at the agency or program level. When agencies update their program policies, such as eligibility criteria, these changes have consequences for the whole ECE system (Maricle & Davies, 2021). For example, the recent decision to expand Transitional Kindergarten in California to include all 4-year-olds by 2025 could have an impact on Head Start programs by potentially disrupting enrollment and complicating outreach efforts.

#### Families in Need of ECE Services Face Obstacles to Enrollment

Of primary concern for Head Start California is how to best reach the focal population—specifically, parents—in the wake of the COVID-19 pandemic. Low-income individuals and families may choose not to participate due to various reasons: "inertia, lack of information, stigma, the time and 'hassle' associated with applications and program compliance, as well as some programs' non-entitlement status" (Ribar, 2014). Applying for Head Start requires a level of parental engagement that may not be feasible for some households. Families with internet access and an awareness of Head Start programs can find key information about the program online. However, self-initiated or online application processes can still present barriers for vulnerable families. One study identified that African American mothers of preschool-aged children receiving government assistance reported less involvement in their child's education than their peers, especially mothers who grew up with negative parenting experiences (Jarrett & Coba-Rodriguez, 2015). Another study of low-income parents identified that over 80 percent of the sample found their child's early education program through friends and family or via their local public services, suggesting the secondary importance of online information as compared to peer-to-peer and other local networks (Bassok et al., 2018).

Further research underscores the focal population's heterogeneity and implies the need for a diverse marketing and outreach strategy to reach eligible households. A study on Head Start-eligible low-income parents utilizing 1996 data from the national evaluation of Early Head Start identified significant differences in parenting practices (Maupin et al., 2010). Whereas stress and material poverty affect all low-income households, personal and psychological resources to cope vary greatly, and these individual differences matter for parents and their children (Maupin et al., 2010). The study concludes that practitioners should develop a deep understanding of parents' coping skills, support systems, and perceptions of resource availability (Maupin et al., 2010). Furthermore, it bears emphasizing that some eligible households may always choose an alternative ECE option for reasons outside of an ECE provider's control. One Louisiana-based study found that convenience may be the largest factor for low-income parents choosing an early education program (Bassok et al., 2018).

#### **ECE** Needs are Evolving

Why do parents choose specific ECE programs over other options? What are the factors that are influencing their decisions? Such questions have become increasingly urgent for ECE policy makers and service providers in California as parents are faced with a more complex array of choices. One report conducted by the equity-focused nonprofit Catalyst California examines the

decision-making factors for California families through a survey and focus group interview (*What We Do*, 2023; Harris et al., 2022). Across both the survey and focus groups, the main priority for parents when choosing a program was the health and safety (both physical and emotional) of their child (Harris et al., 2022). Other factors for families included having strong communication with parents, creating a nurturing environment for children, offering age-appropriate activities that spur child's development, and having a culturally and linguistically affirming community (Harris et al., 2022). Working parents expressed the difficulty of finding a ECE program that operated during business hours; many had to resort to outside networks such as family neighbors for childcare (Harris et al., 2022). In rural counties, many parents found it near impossible to find programs near their homes (Harris et al., 2022). Overall parents across the state wanted a safe and nurturing environment for their children with active communication with parents and individualized care that worked with their schedules (Harris et al., 2022).

#### **II. RESEARCH OBJECTIVES, SCOPE, AND METHODOLOGY**

This report measures (1) the extent to which Head Start providers in California are operating in areas with the most substantial need for early care and education (ECE) services, as defined by Head Start program eligibility criteria, and (2) the extent to which eligible households are aware of the existing programs, as well as the factors that influence decisions to enroll in Head Start. To address the first research objective, the team analyzed data on the need for ECE and the supply of Head Start programs and available slots, and measured the extent to which a gap exists between the demand and supply. We also interviewed subject matter experts on appropriate metrics to measure the need and supply of ECE services. Three variables entered the demand analysis: (1) children under five years old living in poverty; (2) children under five years old receiving SNAP/CalFresh benefits; and (3) children under five years old with gross household income up to 200% of the federal poverty level (FPL). To measure increased demand resulting from the categorical eligibility expansion, the study utilizes the number of CalFresh recipients as the lower bound and households earning 200% of the FPL as the upper bound, since not all households earning 200% of the FPL or less in California receive food assistance. To address our second research objective, the team deployed an anonymous, IRB-approved survey for parents and guardians of young children in California to learn more about the factors that influence families' decisions in enrollment in ECE programs as well as their knowledge of Head Start. Survey distribution was done in partnership with organizations who work with this specific demographic. To account for survey bots who threaten the validity of the data, many techniques were employed to clean the data: (1) eliminating survey responses completed at the same minute (2) removal of responses with dubious text answers (3) income validity check.

#### Research Objective 1: Measuring Supply and Demand of Head Start Services in California

#### Head Start Program Eligibility.

Head Start program eligibility is determined primarily by a child's household income. Eligible households can earn up to 100% FPL, and states may allocate up to 35 percent of Head Start slots to children in families or households earning up to 135% FPL (*Apply for Services*, 2022).<sup>12</sup> Children 0-5 years old experiencing homelessness, in foster care, or receiving public assistance are categorically eligible (*Apply for Services*, 2022). In April 2022, the HHS Office of Head Start expanded categorical eligibility to include all Supplemental Nutrition Assistance Program (SNAP) recipients (*SNAP Eligibility for Head Start Services*, 2022). In California, households receiving CalFresh–California's SNAP program–cannot have net household incomes more than 100% FPL but may earn up to 200% FPL in gross income (*Eligibility and Issuance Requirements*, 2022).<sup>13</sup> Therefore, the categorical eligibile for Head Start services in California by effectively raising the gross income threshold to 200% FPL.

<sup>&</sup>lt;sup>12</sup>The FPL is variable and depends on the number and age of persons in family or household. The thresholds issued by the Census Bureau are used throughout the United States, not varying by geography. For example, according to the U.D. Department of Health and Human Services' (HHS) public website, the 2023 poverty guideline for a family or household with 4 persons is \$30,000 for the 48 contiguous states and the District of Colombia (*Poverty Guidelines*, 2023).

<sup>&</sup>lt;sup>13</sup>According to the California Department of Social Services, gross income is earned income and unearned income that is non-excludable. For example, a family or household with 4 persons may have a monthly gross income of up to \$4,418—200% of poverty level—to be eligible for CalFresh *(Eligibility and Issuance Requirements, 2022).* 

#### Demand Data Analysis and Assumptions.

The project team made several assumptions to estimate the number of children under five in California in need of ECE services. The team primarily analyzed census data to determine the number of children ages 0-5 in California that are eligible for Head Start programming; specifically, American Community Survey (ACS), 2021, 1- and 5-year estimates.<sup>14</sup> The team also utilized CalFresh data from the California Department of Social Services to determine the number of children under five years old that are now categorically eligible for Head Start programming. To determine the number of California children under five living in poverty, the team analyzed ACS, 2021, 5-year estimates of the poverty status in the past 12 months by sex and age (table ID: B17001). These data produced county-level estimates of male and female children under five. To determine the total number, the team simply aggregated the two inputs per county and summed the total of all counties to derive the total in California. These data were developed by the U.S. Census Bureau, are representative and straight forward, and do not require additional assumptions or calculations.

Estimating the number of children under that receive CalFresh required utilizing recent California Department of Social Services data on annual CalFresh participation. These data produced aggregate county-level estimates of child participants under 18 years old in 2021. Assuming that the percentage of children under age five in this population is proportional to the total population produced an estimate of the number of CalFresh children young enough for Head Start. The number of children under five throughout California that live in households or families with incomes up to 200% FPL came from ACS 2021 and 1- and 5-year estimates of the ratio of income in 2021 to the poverty level (specifically, ACS table ID B13004 and B05010). These data produced county-level estimates of the total population in California, including children, with income that fall within the income ratio to poverty level of 1.00 to 1.99. These data, however, are aggregate estimates and required additional assumptions and calculations to isolate the number of children under five years old from children of other ages.

To produce the needed estimate, the team leveraged ACS, 2021, 5-year estimates of table ID B13004, which measured ratios of income of the total population of all ages in every county in California. Two assumptions applied to these data: (1) that the number of children under age 18 were proportional to what is found in the total population and (2) that the number of children under age 5 is also proportional.<sup>15, 16</sup> The estimate of total California children under five in households that earn up to 200% FPL supports estimation of the upper bound of potential SNAP recipients, and by extension the upper bound of new potential Head Start participants.

<sup>&</sup>lt;sup>14</sup>According to the U.S. Census Bureau's public website, ACS 1-year data is a representative estimate at the national, state, and county level, among other levels (*Survey Data Collection and Methodology Considerations for Poverty Data*, 2021). ACS 1-year estimates exist for places with populations greater than 65,000 people, and estimates of places with a smaller geography and populations are available in ACS 5-year estimates (*Survey Data Collection and Methodology Considerations for Poverty Data,* 2021).

<sup>&</sup>lt;sup>15</sup>To check this estimate against other available data, we made the same assumptions across other ACS data sets. Specifically, ACS, 2021, 1-year estimates of table ID B13004 and ACS, 2021, 1-year estimates of table ID B05010. We tested Alameda County, an input that is available in all data sets, and the estimated number of children under five years old was within 1,000 children of each other. This suggests that the available data sets produce estimates that are relatively similar.

<sup>&</sup>lt;sup>16</sup>Data used to estimate children under five years old living with families making up to 200% FPL studies 2020 income, not 2021 like all other data used. Still, the estimates are like other data sets that study 2021 income ratios.

Aggregating this estimate with the number of children under five living in poverty up to 100% FPL provides an estimate of the number of young children that are categorically eligible for Head Start programming in California because they receive CalFresh benefits.

#### Estimating Service Supply.

To quantify the supply of Head Start services, data were obtained directly from the client. The dataset included information such as names of the agencies operating Head Start sites, names and addresses of the sites, and the enrollment data for each site by the type of the program in California as of 2021. The two main program types are Head Start and Early Head Start, and each includes standard programs as well as migrant, seasonal, and tribal programs (altogether referred to as "Head Start programs" throughout this report). The data measure how many Head Start sites there are in California and how many children each site can currently accommodate.

Spatial analysis was essential to identify counts of Head Start sites and enrollment slots for each county in California and each census tract within a given county. To enable further spatial analysis, the dataset was geocoded in ArcGIS Pro software, and all the sites except for one, which was dropped due to an incomplete address entry, were successfully mapped. A combination of geoprocessing tools (e.g., Overlay or Proximity Toolsets from Analysis Toolbox, Joins and Related Toolsets from Data Management Toolbox) were used to quantify the total number of Head Start locations and the total number of seats in each county or census tract.

#### Measuring Gaps of Demand and Supply.

To estimate the gap between the supply and demand of Head Start services among the target population, two main approaches were identified:

- 1) estimating the ratios of demand to supply within the boundaries of a selected unit of observation;
- 2) estimating the extent of access to supply from a selected unit of observation based on its demand level.

The first approach helps understand the big picture of which units of observation do or do not experience the lack of Head Start services relative to the existing demand level. This analysis was possible to perform both at the county and census tract levels. The target population eligible for Head Start was divided by the actual number of Head Start enrollment slots. The ratio enables more standardized comparisons of counties and census tracts. The second approach supported identification of neighborhoods with a lack of Head Start services and is especially critical as physical access to ECE facilities is a significant factor in program enrollment. In 2016, the Center for American Progress introduced a definition of childcare deserts–areas with an insufficient supply of licensed childcare–to assess trends in proximity to childcare as one component of a child's ability to attend a high-quality early childhood program. They later found that 51 percent of Americans lived in neighborhoods classified as childcare deserts, and that share in California was 60.3 percent (Center for American Progress, 2018).

The ensuing spacial analysis aims to identify areas that do or do not have reasonable access to Head Start facilities and is most useful when performed at the census tract level due to data granularity. Census tracts with Head Start facilities within their own boundaries or within 3 miles are considered census tracts with "reasonable access." Those that have access outside of a 3-mile

distance but within 7 mile tracts have "limited access." Finally, tracts that are 7 miles or greater from a program site have "no access." The thresholds are constructed based on the findings of the National Survey of Early Care and Education Project Team (2016). Their breakdown of distances includes 0, between 0 and 1 mile, between 1 and 3 miles, between 3 and 8 miles, and more than 8 miles. In the report, the average distance from home to a center-based ECE provider among households with low income (0-200% FPL) was 3.4 miles for children under 3 and 3.15 miles for children 3-5 years old, while higher-income households were able to travel farther distances. However, considering that this analysis takes into account census tract territory as a whole, rather than individual home addresses, lower-bound thresholds were set. Similarly to the first approach, the relevant ratio was derived for standardized comparison of census tracts: the ratio of eligible children to slots within a distance of 3 miles.

Another method is the use of hot spot and clustering analyses. The hot spot analysis and clustering analysis are both useful because they visually show where units of interest are concentrated through different color schemes. The units of interest include not only service providers and children from low-income families, but also the extent of disparities between supply and demand. For example, hot spot analysis demonstrates statistically significant hot and cold spots of service providers, while density-based clustering analysis identifies clusters of service providers based on their spatial distribution.

#### Selection of Counties for Census Tract-Level Analysis.

In view of the time and technical limitations of the USC project team, detailed analysis at the census tract-level was limited to a pool of ten counties that were selected in consultation with the client (see Figure 2.1). Specifically, the selection was made in consideration of the following two criteria: 1) the absolute number of the target population living in or near poverty in each county above 10,000; and 2) the level of disparity of the target population living in or near poverty relative to the total target population size in each county.

0 1	8 1	-
California County	Population Under 5 Living in or Near Poverty	Percentage of Total Population Under 5
Tulare	19,113	53
Fresno	38,858	52
Merced	10,658	51
Kern	33,548	49
Stanislaus	15,525	10
San Bernardino	59,520	40
San Joaquin	20,489	39
Monterey	11,153	37
Los Angeles	204,983	36
Sacramento	33,296	34

Figure 2.1: Proportion of Children Living In Poverty of Total Population Under Five

Source: Analysis of ACS, 2021, 1- and 5-year data.

On the one hand, it is efficient to closely look into counties with high concentrations of low-income preschool-age children. For example, nearly 90 percent of children under five in California (over 2 million) reside in 20 counties that make up only half of the state's area. Moreover, counties with the highest populations of children under five are also the counties with

high populations of children living in poverty. On the other hand, some counties experience more severe disparities in child poverty despite having smaller populations, and if overlooked, those disparities may persist. For example, as shown in Figure 2.1, some counties have much higher percentages of children under five living in or near poverty relative to the total population.

#### Limitations of Estimating Demand.

The estimates of children under five years old that (1) live in poverty, (2) have families or subfamilies earning incomes up to 200% FPL, and (3) are CalFresh participants (all eligible for Head Start) are likely conservative estimates. Moreover, estimates are derived from 2021 data. Despite these limitations, the project team believes that these data and estimates and assumptions are reasonable to analyze need throughout California for ECE services as well as inequities in access. In line with the Census Bureau's recommendation for studying poverty found on its public website, ACS 1- and 5-year data were utilized to analyze poverty at the state and county level because of the data's large sample size (*Which Data Source to Use for Poverty*, 2021).

Another limitation is that ACS estimates developed by the U.S. Census Bureau apply to the population of Californians for whom poverty status is determined. This signifies that not all of California's population is included in this estimate, namely the so-called hard to reach populations. For instance, the population for whom poverty status is determined leaves out approximately 700,000 Californians according to U.S. Census Bureau ACS data.<sup>17</sup> According to the U.S. Census Bureau, people whose poverty status cannot be determined include U.S. service members living in military barracks, those persons living in unconventional situations or housing, students living in college dormitories, and persons in institutional group quarters, such as prisons or nursing homes (How the Census Bureau Measures Poverty, 2023). While these limitations will have minimal impact on the target population of interest for this analysis, they could impact families with young children living in unconventional situations. In addition, poverty status cannot be determined for children under 15 years old that are unrelated and not living with a family member, such as foster children (How the Census Bureau Measures Poverty, 2023). According to the U.S. Census Bureau, this is because unrelated subfamilies cannot be assigned in household data reporting; persons not biologically related are categorized as unrelated persons (Survey Data Collection and Methodology Considerations for Poverty Data, 2021). This results in exclusion of this population from the universe of individuals living in or near poverty, further limiting the true estimate of children under five that are eligible for Head Start programming (How the Census Bureau Measures Poverty, 2023).

#### Possible Underestimation of Poverty Data.

A comparison of poverty data with other data sources was also conducted to check for robustness. Some studies indicate that OPM's poverty estimates among children of preschool age as standalone data could be underestimated. Particularly, the California Poverty Measure (CPM) was created by the PPIC and the Stanford Center on Poverty and Inequality to provide a more comprehensive poverty measure that accounts for such additional variables as housing costs and safety net benefits. Compared to the official estimates of 16.1 percent during that period, CPM estimated poverty among children under five to be 21.2 percent with safety net measures accounted for and 29.4 percent without (Public Policy Institute of California, 2017).

<sup>&</sup>lt;sup>17</sup>According to ACS 2021 data, the U.S. Census Bureau determined the poverty status of approximately 38.1 out of 38.8 million people in California.

#### Double Enrollment.

However, since the target population may also attend other ECE programs along with Head Start programs and dual enrollment is not considered due to the absence of a centralized enrollment tracking system, this number should not be taken at face value. As mentioned, the study does not consider other ECE programs, so absolute numbers describing the gap should not be taken at face value. Even if the study included other programs, underestimations and overestimations would have been highly likely to be present. The underestimation would be present due to the possible dual enrollment of children in more than one publicly subsidized program, and more children would have been counted to be served by ECE programs. As no agency assigns unique child identification numbers (IDs) to children enrolled in publicly subsidized programs, the magnitude of dual enrollment remains unclear (American Institutes for Research, 2016). For example, the American Institutes for Research's recent survey of Head Start grantees estimated that 25 percent of children enrolled in Head Start statewide also received funding from other sources (2016). Overestimations would root in an unanticipated expansion of other publicly subsidized programs, such as TK, a decline in child poverty, or a decline in childbirth over years.

#### Measuring Distance to Head Start Locations.

Caution should be taken when considering the distances identified above as the project team did not have access to home address data of families with children under five and was only able to measure the distances from a particular census tract.

# **Research Objective 2: Identifying Parental Decision-Making Factors and Head Start Familiarity with Survey Instrument**

#### Motivations and Ethical Considerations.

To answer the second research question, the project team conducted an anonymous, short (5-10 minute) survey for parents who live in California to understand their decision-making factors in choosing ECE programs as well as how knowledgeable they are of Head Start programs. The survey instrument was administered through Qualtrics in English, Spanish, Korean and Russian (see Appendices I-L for survey instruments in each language). The survey consisted of multiple-choice questions examining ECE program choice and influential factors, levels of Head Start familiarity, and how respondents heard of Head Start, in addition to questions on respondents' demographic information. Of primary interest was testing the hypothesis that Head Start is a "well-kept secret " that eligible families do not know about, as well as testing whether inequities exist in knowledge of Head Start programs. Further, of primary interest to the client and the project team was identifying differences in outcomes across four key indicators: race/ethnicity (white vs. non-white), poverty status (above vs. below 200% FPL), geographic area (rural vs. urban), and state region (Northern vs. Southern California). Collecting demographic information was thus essential, although doing so can introduce ethical concerns given that this requires respondents to share personal information. The project team secured IRB approval from the University in Southern California in January 2023 via an expedited exempt review, as minimal risk of harm was identified for prospective survey participants.

#### Target Survey Respondents.

To understand the decision-making factors of families regarding ECE programs for their children, the project team sought input from California parents of elementary aged children,

anticipating that information about past ECE enrollment decisions would more likely still be remembered given recency of occurence. Given the project team's exclusive interest in hearing from parents of young children in California, the survey instrument screened for California residents and for parents and guardians of children aged ten or younger. Low-income families were another target group for this survey because their input could inform future strategies to enroll prospective Head Start students from similar backgrounds. It was also important to survey higher income families who would not qualify for Head Start services because they would act as the comparison group. To prevent bias in the data, the project team made a concerted effort to recruit respondents outside the Head Start network; a sample with overrepresentation of Head Start users would threaten internal validity and would not enable credible testing of the client's hypothesis that Head Start is a "well-kept secret."

#### Survey Distribution Strategy.

A multitude of California-based partner organizations that serve parents whose characteristics align with the project team's target demographics assisted in distributing the survey. These nearly 20 distribution partners utilized their networks and shared the survey via various channels, such as social media (primarily Instagram, Facebook, and LinkedIn) and e-newsletters. All survey distribution partners can be found in Appendix A. To incentivize survey completion, respondents were given the option to enter a raffle for a \$100 VISA gift card. To ensure anonymity per IRB requirements, respondents who completed the survey had the option to click on a second URL to enter the raffle by providing contact information. Three randomly selected survey respondents received a \$100 VISA gift card in April 2023 generously funded by the client.

#### Survey Cleaning and Analysis.

The project team utilized STATA to import and clean all complete responses submitted upon Qualtrics survey closure on March 31, 2023. Cleaning the survey data was an essential first step before generating tables and conducting analysis of responses by race, poverty level, geographic area, and state region. Respondents were coded as "white" or "non-white" depending on the racial and ethnic information they provided and as "under 200% FPL" or "above 200% FPL" depending on their reported household size and income (see Appendix F for details on how household poverty status was calculated). Additionally, respondents were coded as "north" or "south" and "rural" or "urban" based on the classification of their reported county of residence. With data cleaning, a primary concern was the removal of robot or "bot" responses. Survey bots or automated programs used by individuals/groups to fill out surveys are becoming a more pervasive problem as bots can be created in minutes and can be especially a problem when there is a monetary incentive (Griffin et al., 2021). It is therefore important to take measures to clean the data and remove bot responses which are a threat to the data's validity (Xu et al., 2022). The project team employed three rigorous techniques to remove more than 1,000 bot responses:

- *Deleting responses submitted within the same minute*. One bot detection strategy utilized in this project was removal of survey responses submitted within the same minute. It is highly unlikely that different people began a survey within a minute of each other therefore these responses are more likely to be an algorithm submitting multiple entries at once.
- *Manual removal of responses with suspicious text responses*. Another method to cleaning the data of responses were removing responses where the text did not

match the question, or gave the impression that words were generated using artificial intelligence. Examples suspicious open-ended responses used to flag bot responses can be found in Appendix H.

• *Income and public benefits reconciliation.* The last method utilized was cross checking the income ranges reported by participants who also reported receiving at least one public benefit. If a participant's income was much too high for a public benefit they claimed to receive, the response was removed.

#### Analytic Criteria

With the vision of being "the provider of choice for California's most vulnerable children and families," Head Start California in their 'Strategic Plan: 2023 and Beyond' set a strategic goal of "wider recognition in California among families with young children" by raising awareness about Head Start programs (*Strategic Plan: 2023 and Beyond*, 2022). Thus, the project team identified social equity as a leading criterion for analysis, with the client's vision and strategic goals at the core of the research process. Allocation of Head Start services can be equitable if all California's vulnerable families with children have genuine access. While the target population of Head Start programs already includes children living in or near poverty, the equitable access in this analysis is further evaluated in two ways: 1) physical accessibility, and 2) knowledge or information accessibility. The two methodologies employed–spatial analysis and survey analysis–were developed with consideration of these two aspects of equity.

#### Physical Accessibility.

Considering the existing gaps between the supply of California's ECE programs, including Head Start programs, and the needs of eligible families, it was not clear to what extent current Head Start programs were (or were not) accessible to eligible children and whether the geography of such (in)accessibility could be traced. The spatial analysis evaluates whether and where the current distribution of all Head Start services in California is (un)equitable at the county and census tract levels.

#### Knowledge Accessibility.

While parental awareness is one of the key factors mentioned in research exploring families' intake of government-led social programs, the client raised the concern of whether a gap in knowledge exists for eligible households across demographic groups. This prompts an additional question of whether (lack of) awareness about Head Start influences parents' decisions to enroll and not to enroll their children in Head Start programs. The survey instrument assesses that gap through the lens of equitable access to knowledge and information by investigating outcomes across race, poverty level, geographic area, and state region.

#### **III. SPATIAL ANALYSIS FINDINGS**

The need for ECE in California outstrips the supply of Head Start programs and enrollment slots by a magnitude of eight. The need estimate takes into account the recent expansion of Head Start's categorical eligibility to include CalFresh recipients. In many cases, the expansion of Head Start's categorical eligibility doubled the amount of eligible children throughout counties in California. This includes children under five living in families or households with incomes up to 200 percent of the FPL. Many counties in California have high proportions of children under five living in or near poverty–some counties have as high as 71 percent of its total population of children under 5 living in or near poverty. In addition, Head Start locations are unevenly distributed throughout some counties and offer inequitable access to its population most in need. While the estimates of eligible children throughout California are high, more than eight times the number of Head Start enrollment slots, the estimates do not represent actual demand; rather, the estimates of eligible children for Head Start represent potential demand, and do not consider other ECE programs in California that could absorb potential demand.

#### Head Start Supply in California

Head Start programs are present in nearly all counties in California with the exceptions of Alpine, Mono, and Sierra Counties. Three counties–Los Angeles, San Diego, and Sacramento–are home to 41 percent of all Head Start locations, or 790 out of 1,916 locations. This is likely due to the high population present in these counties. Los Angeles and San Diego counties are California's most populated counties, while Sacramento ranks eighth. In the remaining 52 counties, the count of Head Start locations range from 1 to 85, with most of them, or 67 percent, having fewer than 20 Head Start locations. Throughout California, Head Start programs offer 88,600 enrollment slots, and on average, each Head Start location can accommodate 46 slots with the variation ranging from 0 to 393 slots per location. The top four counties: Los Angeles County, home to 30 percent of slots (26,719 slots); San Diego with 10 percent (8,777 slots); Sacramento with 6 percent (5,701 slots); and San Bernardino with 5 percent (4,444 slots). Together, these four counties offer more than half of the total Head Start enrollment slots available in California (see Figure 3.1). Excluding these outliers, nearly two-thirds of the rest of the 51 counties that have Head Start locations, or 37 of them, are home to around 1,000 slots each.



Figure 3.1: Head Start Enrollment Slots in California

Source: Analysis of Head Start California data.

#### Head Start Demand in California

In 2021, nearly every county in California had eligible children under five living in poverty, except for Sierra County. Throughout California, in 2021, there were an estimated nearly 375,000 children under five living in poverty, all eligible for Head Start services. In Los Angeles County alone, there were a little over 100,000 children under five years old living in poverty during the same period.

The recent expansion of Head Start eligibility to include CalFresh recipients increased the potential demand for Head Start services in California by a little over 70,000 children. According to 2021 CalFresh participant data, there were nearly 450,000 children under five receiving CalFresh benefits, all eligible for Head Start services by extension of categorical eligibility. In Los Angeles County alone, in 2021, there were over 125,000 children under five years old receiving CalFresh benefits. In Sierra County, where there were no estimated children under five living in poverty, there were 11 children under five receiving CalFresh benefits. These CalFresh recipients in Sierra County had the potential to create new demand for Head Start services in a county that previously had no eligible children.

A greater estimate of potential demand in California is the inclusion of children under five living in households or families with incomes up to 200% FPL that are eligible for CalFresh benefits, and, by extension, potential Head Start services. In 2021, every county in California had eligible children living in families or households with incomes up to 200% of the FPL, all eligible for Head Start services. During the same period, greater than 750,000 children under five in California were estimated to live in families or households with incomes of 0-200% FPL, double the total number of children under five living in poverty for whom poverty level is determined by the U.S. Census Bureau, and over 300,000 more children under five estimated to receive CalFresh (see Figure 3.2). In Los Angeles County alone, there were a little over 200,000 children under five living in families or households with incomes up to 200% of the FPL, double the official estimate of children under five living in poverty.

Including the number of children living in families or households with incomes of 100-200% FPL increased the number of eligible children under five by 100 percent or greater in 34 out of 58 counties in California. For example, in Amador County, the increase was greater than 300 percent.

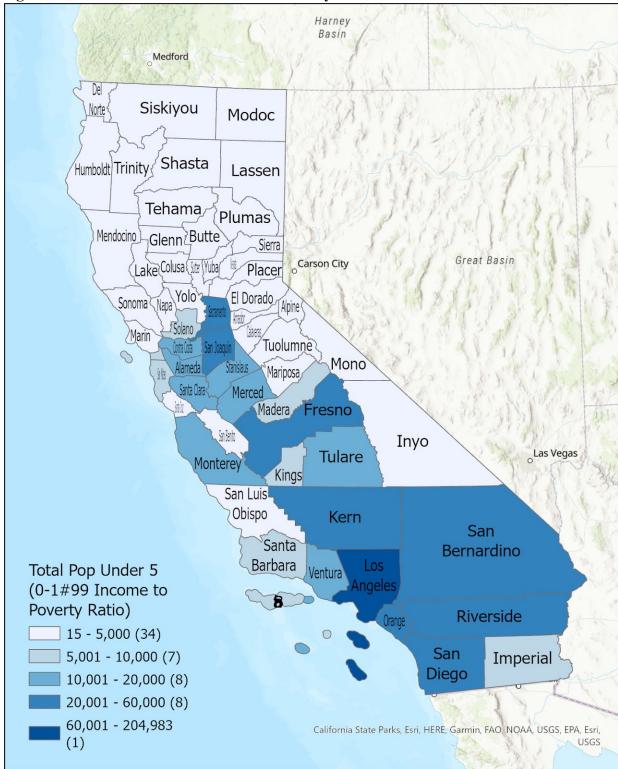


Figure 3.2: Children Under 5 in or Near Poverty in California

Source: Analysis of ACS, 2021, 1- and 5-year data.

#### Head Start Supply and Demand in California

The current supply of Head Start services does not meet the potential demand for those services in California. The potential demand for Head Start services greatly outstrips the number of slots provided by Head Start programs throughout California. As of 2022, there are approximately 88,600 Head Start slots available in California, only about one-eighth of the number required to serve the estimated number of children eligible to receive Head Start services. In every county throughout California, the number of available Head Start slots is less than the need. Invo County fares the best in terms of supply meeting demand. In Inyo County, there are 92 Head Start slots and 94 children under five years old living in poverty, a near 1:1 match. However, when considering the recent expansion of eligibility to include CalFresh recipients, this ratio of supply and demand diminishes to nearly one slot per every two eligible children. Still, this county fares best compared to others in California. For counties with large populations, like Los Angeles County, the supply to demand ratios are hardly proportional. While Los Angeles County is home to the greatest share of Head Start slots in California at greater than 25,000 slots, the need and potential demand is eight times greater. In 2021, there were an estimated over 200,000 children under five living in households or families with incomes up to 200% of the FPL, all eligible for Head Start services. In Los Angeles County, there could be up to seven eligible children under five competing for every one Head Start enrollment slot.

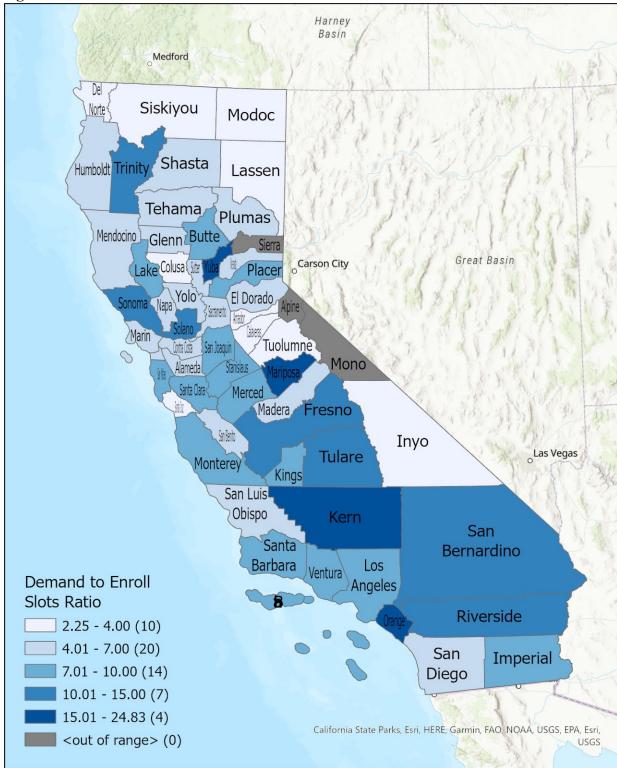


Figure 3.3: Potential Demand to Head Start Enrollment Slots in California

Source: Analysis of ACS, 1- and 5-year estimates and Head Start California data.

#### **Census Tract-Level Analysis: Selection and Findings**

Many urban counties in California have a high proportion of children under five living in or near poverty compared to their total population of children under five years old. Of the counties in California with a population of 10,000 or greater children under age five living in or near poverty, the top ten counties with the highest disparity were majority urban counties except for Tulare, Merced, and Monterey County (see Figure 2.1).<sup>18</sup> Tulare, Fresno, Merced, and Kern Counties had the highest disparity with approximately half of their total populations of children under 5 living in or near poverty. For example, in Tulare County, in 2021, 53 percent of its children under five, or approximately 19,000 out of approximately 36,000, lived in or near poverty. Of those top ten counties in California, most of those with higher levels of access to Head Start services were urban (6 of 10) (see Figure 3.4). Most are counties in Northern California (7 of 10).

In terms of the existing gaps between supply and demand in the selected counties, some inequitable distribution of Head Start locations and slots is visible. While Kern and Sacramento counties have comparable counts of eligible children, Sacramento has more than two times the number of Head Start slots compared to Kern, resulting in a much lower demand to supply ratio, i.e. children per slot (6.52 in Sacramento vs. 15.10 in Kern). Apart from Kern, other highest deficits are in the counties of San Bernardino (13.39) and Fresno (13.45).

When it comes to the gaps in access, as expected, eligible children in urban counties generally have better access compared to rural counties, both within 3 and 8 miles. The derived results at the 3-mile threshold especially present valuable insights, which can be seen in Figure 3.4. It shows percentages of children with access to Head Start slots at the ratio of 1 child per slot or lower, percentages of children who need to share access to Head Start slots, and percentages of children who have no access within that distance. At the 3 mile threshold, the majority of urban counties show higher percentages of eligible children with Head Start access (from 52 to 93%), compared to the rural counties (28 to 44%). When the competition for slots in the rural counties is higher. The only exception is Kern, where only 3% of eligible children have 3-mile access to Head Start, and 89% of children need to share slots that are available within 3 miles. The county of San Bernardino, despite being an urban county, still has a high number of eligible children without access to Head Start within 3 miles.

Below are analyses of two of the ten counties–Fresno and San Bernardino. For the results of the other eight counties, see a summary in Figure 3.4 as well as detailed maps in Appendix C.

<sup>&</sup>lt;sup>18</sup>We identified 40 rural counties in California based on the counties represented by the Rural County Representatives of California (RCRC), a service organization. We deduced from this source that the remaining 18 counties are classified as urban counties.

County	Urban/Rural	N/S	Total	HS	HS	HS	Demand	Demand/
county	orbany Kurai	14/3	Tracts Tracts	Tracts	Locations	Slots	Demand	Supply
Los Angeles	Urban	Southern	2,498	408	512	26,719	204,983	7.67
San Bernardino	Urban	Southern	466	42	45	4,444	59,520	13.39
Fresno	Urban	Northern	225	47	60	2,890	38,858	13.45
Kern	Urban	Southern	236	38	48	2,221	33,548	15.10
Sacramento	Urban	Northern	363	92	122	5,108	33,296	6.52
San Joaquin	Urban	Northern	174	63	85	2,441	20,489	8.39
Tulare	Rural	Northern	103	30	36	1,629	19,113	11.73
Stanislaus	Urban	Northern	112	40	48	1,951	15,525	7.96
Monterey	Rural	Northern	104	21	32	1,357	11,153	8.22
Merced	Rural	Northern	63	26	35	1,419	10,658	7.51

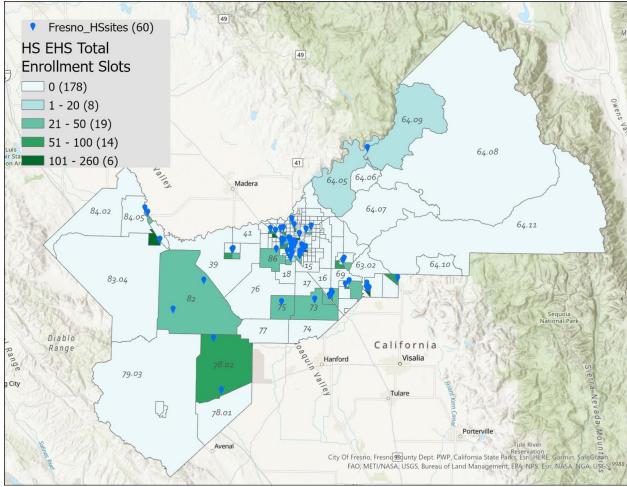
Figure 3.4: Summary of Census Tract-Level Analysis Findings

County	3-Mile Access	3-Mile Competition	No 3-Mile Access	8-Mile Access	8-Mile Competition	No 8-Mile Access
Los Angeles	93%	5%	2%	99%	1%	0%
San Bernardino	52%	34%	14%	80%	16%	4%
Fresno	55%	41%	4%	85%	14%	1%
Kern	3%	89%	8%	75%	23%	2%
Sacramento	90%	7%	3%	100%	0%	0%
San Joaquin	74%	25%	1%	90%	10%	0%
Tulare	28%	71%	1%	65%	35%	0%
Stanislaus	72%	28%	0%	89%	11%	0%
Monterey	44%	53%	3%	63%	36%	1%
Merced	42%	58%	0%	78%	22%	1%

Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

#### Fresno County.

Fresno County has the sixth most eligible children under 5 living in or near poverty in California, amounting to nearly 40,000 children under 5. A little over half of the total amount of children under 5 in Fresno County live in or near poverty. At the county-level, at least 10 eligible children compete per Head Start enrollment slot (see Figure 3.5). In Fresno County, there are 60 Head Start locations offering nearly 3,000 enrollment slots. Throughout the 225 census tracts in the county, there are Head Start locations in nearly 50 census tracts while over 170 census tracts have no Head Start presence. As depicted in Figure 3.5, Head Start locations in Fresno County are concentrated in the city center, where the population is most dense.





While the concentration of Head Start locations help meet demand in the city center, census tracts outside of the city center have limited availability where the demand is greatest. For example, census tracts 82 and 78.02, located in the west and south-west regions of the county, have considerable service gaps. These counties are home to more than 500 eligible children but have fewer than 100 Head Start enrollment slots each (see Figures 3.6 & 3.7).

Source: Analysis of Head Start California data.

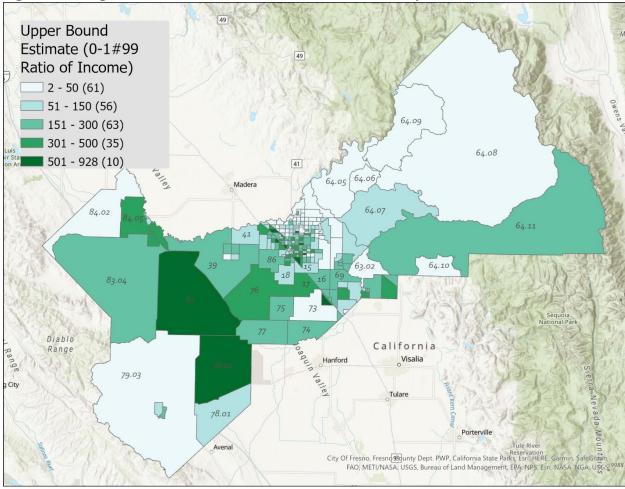


Figure 3.6: Eligible Children for Head Start in Fresno County

Source: Analysis of ACS, 2021, 1- and 5-year data.

Families and children under five in need of Head Start services may travel to other areas with a greater concentration of Head Start locations and enrollment slots, but transportation may be a challenge for families living in or near poverty. In Fresno County, approximately 55 percent of eligible children have access to Head Start services within 3 miles with little to no competition; approximately 41 percent of all eligible children have access within 3 miles but have to share or compete for enrollment slots; approximately 4 percent of all eligible children have no access to Head Start services within 3 miles. Access to Head Start services varies by census tract and is unequal throughout the county. For example, census tracts 82 and 78.02, the same tracts described above as having an outstanding need (see Figure 3.6), have little access to Head Start locations within 3 miles (see Figure 3.7). Eligible children for Head Start in those census tracts have to compete with others for every enrollment slot. For example, in census tract 78.02, there are up to 8 eligible children per every enrollment slot.

Access to Head Start services is inequitably present in Fresno County. For example, as Figure 3.6 demonstrates, census tract 73 has greater access to Head Start services, but has little demand relative to other tracts, like 82 and 78.02. In census tract 73, eligible children for Head Start have more than enough access to enrollment slots within 3 miles. Within that census tract, there is an

estimated need of between 2-50 children under age five living in poverty (see Figure 3.6). Within that same tract, there are up to the equal amount of enrollment slots: between 21-50 (see Figure 3.5). This census tract thus has equitable access given the match of supply and demand. Meanwhile, other census tracts denoted in shades of green have increasingly inequitable access.

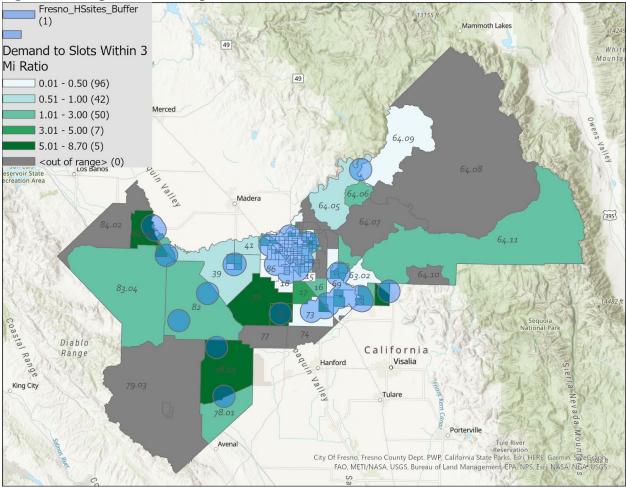


Figure 3.7: Eligible Children per Head Start Enrollment Slot in Fresno County

Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

#### San Bernardino County.

San Bernardino County has a high number of enrollment slots and the second most eligible children under five living in or near poverty in California. In the county, there are 45 Head Start locations with 4,444 enrollment slots, the fourth most supplied county in California (see Figure 3.8). Meanwhile, nearly 40 percent of children under five living in San Bernardino County live in or near poverty, or 59,520 children out of 149,407 total (see Figure 3.9). Despite the relatively high number of enrollment slots in the county, the gap remains significant due to the higher eligible population size: at least ten eligible children under five years old compete for each individual Head Start enrollment slot.

As depicted in Figure 3.8, only 42 census tracts in San Bernardino County-or nine percent of all tracts-currently have Head Start locations within their boundaries, possibly due to the highly

rural area of the county. Most of the Head Start locations are concentrated in the southwestern part of the county, which is the most densely populated area and is located in proximity to Los Angeles County. More than half of Head Start locations can accommodate more than 100 children each, and those locations are all in the western region of the county (see Figure 3.8).

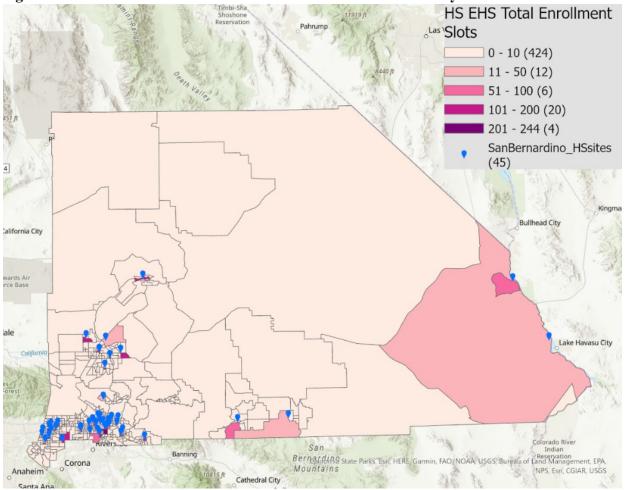


Figure 3.8: Head Start Enrollment Slots in San Bernardino County

Source: Analysis of Head Start California data.

Eligible children for Head Start are not concentrated in particular regions of San Bernardino; rather, eligible children are scattered throughout the county (see Figure 3.9). While in some census tracts the supply of Head Start enrollment slots appear to match the large number of eligible children, there are other tracts that have similarly high rates of eligible children and do not have Head Start locations within their boundaries. For example, more remote census tracts like 104.02 and 250 have an estimate of 514 and 446 eligible children under five living in or near poverty, respectively (see Figure 3.9).

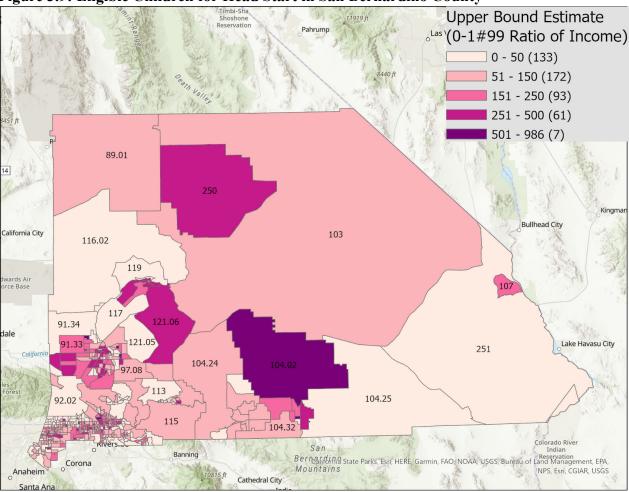
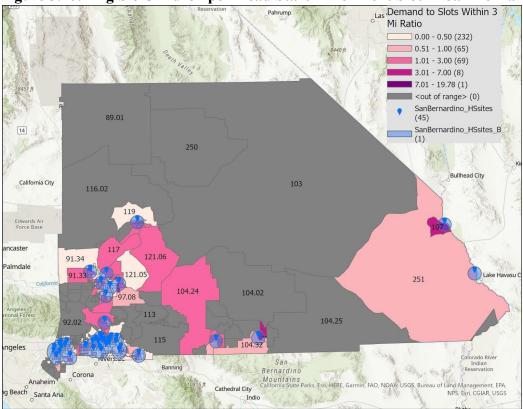


Figure 3.9: Eligible Children for Head Start in San Bernardino County

Source: Analysis of ACS, 2021, 1- and 5-year data.

These gaps become prominent when looking at the ratio of demand in a particular census tract to the number of slots available within 3 miles, rather than the pure demand to supply ratio. When each census tract's ratio of demand to supply is derived, since 91 percent of the tracts have no Head Start locations, the estimates produce null results not allowing for meaningful comparisons of tracts in the county. The ratio of demand to slots within 3 miles shows that 91 tracts, or almost one-fifth of San Bernardino census tracts, do not have access to Head Start locations within 3 miles (see the gray colored census tracts in Figure 3.10). This equals to 8,404 children in or near poverty or 14 percent of the total eligible children in the county without reasonable access to Head Start services. In other 79 tracts, the ratio is above one (1), meaning 20,921 children, or 35 percent of all eligible children, have at least one (1) slot per child. The remaining half of the eligible children need to share slots that are accessible within 3 miles.



#### Figure 3.10: Eligible Children per Head Start Enrollment Slot in San Bernardino County

Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

#### Summary of Key Findings and Themes

The need for ECE in California outstrips the supply of Head Start enrollment slots by a magnitude of eight, largely because many counties have high proportions of children under five living in poverty. In 2021, 13 counties in California had approximately 50 percent or more of its total population of children under five living under 200% FPL.<sup>19</sup> For example, in Mono County, 71 percent of its total population of children under five lived in households earning under 200% FPL. In addition, Head Start locations are unevenly distributed throughout some counties and offer inequitable access to populations most in need. Head Start locations were present in census tracts with little need relative to other tracts, while certain census tracts with the greatest number of eligible children had few enrollment slots within 3 miles. Across the 18 urban counties in California, the demand to enrollment slots ratio ranges from 4 to 19. This means that in some urban counties, there is one enrollment slot for every 19 eligible children. Thirteen of the 18 urban counties have a demand to enrollment slots ratio of 8:1 or less, and five of those urban counties have a ratio of 9:1 or greater. Across the 40 rural counties in California, the demand to enrollment slots ratio ranges from 2 to 25, excluding the three counties with no Head Start presence (Alpine, Sierra, and Mono). Thirty of these 40 rural counties have a demand to enrollment slots ratio of 8:1 or less, and ten of those counties have a ratio of 9:1 or greater. While there is a greater share of rural counties in California, rural counties make up more of the counties with higher demand to enrollment slots ratios.

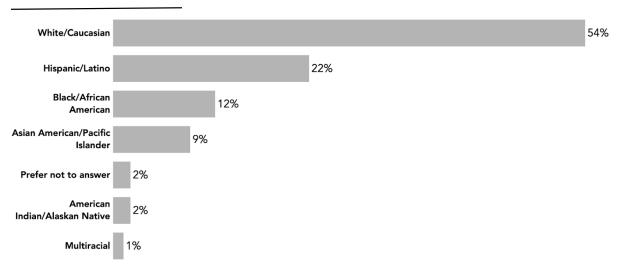
<sup>&</sup>lt;sup>19</sup>The 13 counties are made up of 9 counties with 50% or more, 2 counties with 49%, and 1 county with 48%--approximately 50 percent or more.

#### **IV. SURVEY ANALYSIS FINDINGS**

Between January and March 2023, the project team collected and cleaned survey data from hundreds of screened respondents, producing a sample of 251 individuals living in California with at least one child under age ten that were majority white, female, and living below 200% FPL. Respondents overall reported high levels of familiarity and knowledge of Head Start programs, suggesting that Head Start is not a "well-kept secret" among eligible households in California. However, notable disparities in program knowledge emerged across differences in race, poverty level, geographic area, and state region, the four primary indicators of interest. Respondents most commonly learned about Head Start for their youngest child. Instead, parents who completed this survey most commonly utilized in-home care by a family member or enrolled their youngest child in a childcare center or preschool according to survey data. Program quality surfaced as the most important factor influencing ECE decisions for respondents, although disparities also emerged here, as will soon be made clear. This section concludes with overall themes related to the inequities in knowledge access demonstrated by the survey data and analysis collected from this sample of parents and guardians in California.

#### **Descriptive Statistics of Sample Population**

Respondents were majority white, female, and living below 200% FPL, with nearly 75 percent concentrated between the ages of 35-44 (see Appendix D for more demographic information). As Figure 4.1 demonstrates, a slight majority of respondents identified as White/Caucasian, and the remaining respondents identified as other races/ethnicities.



#### Figure 4.1: Race/Ethnicity of Survey Respondents

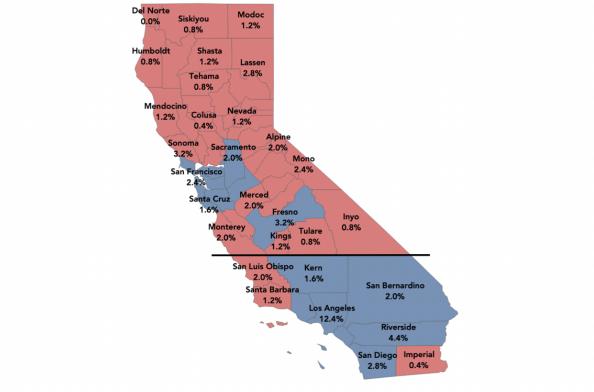
Source: Analysis of USC Parental Survey results.

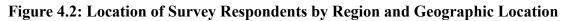
The second most commonly reported racial/ethnic identity was Hispanic/Latino, followed by Black/African American and Asian American/Pacific Islander. Fewer than five percent of respondents identified as American Indian/Alaskan Native or Multracial.<sup>20</sup> Five respondents or

<sup>&</sup>lt;sup>20</sup> Percentages do not sum to 100 percent because respondents were allowed to select all races/ethnicities that applied to them.

two percent of the sample elected not to report their racial/ethnic identity. While 96 percent of respondents reported speaking English at home, nearly 25 percent reported speaking at least one other language at home, primarily Spanish (see Appendix D for more language information).

As Figure 4.2 below demonstrates, residents of all counties in California except Del Norte completed the survey (see Appendix D for a full table of counties of residence). Rural counties are denoted in red, whereas urban counties are denoted in blue. The black line divides Northern versus Southern California counties.





Source: Analysis of USC Parental Survey results.

Los Angeles County is home to 31 respondents or 12.4 percent of the sample, followed by Santa Clara with 4.8 percent and Riverside with 4.4 percent. All three of these counties are classified as urban. A large majority of respondents reported living in counties classified as part of Northern California, while a slight majority of respondents reported living in counties classified as rural.<sup>21</sup>

#### Key Demographic Indicators.

The four key demographic indicators of this analysis are race/ethnicity, poverty status, geographic area, and state region. Each survey response was sorted into a binary category for each indicator based on reported racial/ethnic identity, household size, household income, and county of residence. Summary data for the survey sample across the four primary indicators are

<sup>&</sup>lt;sup>21</sup> To reiterate, a county's status as either rural or urban was determined using information from the Rural County Representatives of California, as was also the case with the spacial analysis.

highlighted in Table 4.1 below. Survey respondents had the most parity across geographic areas and race/ethnicity and the least parity across state regions and poverty level.<sup>22</sup>

Poverty	v Status	Race/Ethnicity	
Below 200% FPL	Above 200% FPL	White	Person of Color
<b>150</b> (59.8%)	<b>101</b> (40.2%)	<b>135</b> (53.8%)	<b>111</b> (44.2%)
Geograp	Geographic Area		Region
Urban county	Rural county	Northern California	Southern California

 Table 4.1: Demographic Characteristics of the Four Primary Indicators

Source: Analysis of USC Parental Survey results.

Approximately 60 percent of respondents live below 200% FPL based on their income and household size, suggesting that the majority earn incomes that would qualify their children for Head Start in California (*HHS Poverty Guidelines for 2023*, 2023). California is unique in that CalFresh recipients may earn up to 200% FPL in gross income provided that net income does not exceed 100% after deducting for excess shelter costs, the standard utility allowance, and dependent care among other deductions (*Eligibility and Issuance Requirements*, 2022). Therefore, while Head Start and Early Head Start requirements dictate that eligible families must earn below 100% or 135% FPL depending on service site capacity, the recent introduction of categorical eligibility for households receiving SNAP raises the income threshold to 200% FPL for California residents (*Apply for Services*, 2022; *Eligibility and Issuance Requirements*, 2022).

The remaining 40 percent of the sample probably does not meet eligibility criteria for Head Start in California because their incomes exceed the 200% FPL threshold. However, this conclusion is not definitive due to data imprecision. Poverty status values as either above or below 200% FPL are approximate given that respondents reported their incomes as a range rather than a precise figure (see Appendix D). Appendix F provides further details on how FPL calculations were conducted in this analysis. Additionally, more than 70 percent of the sample reported receiving at least one public benefit, including SSI, CalWORKS, and Medicare/Medicaid (see Appendix D). The portion of the survey sample that meets Head Start requirements could thus exceed 60 percent due to the availability of additional categorical eligibilities.

#### Early Care and Education Enrollments.

Survey respondents most commonly reported that their youngest child received in-home care by a family member–including care provided by the respondent him or herself–between the ages of 0-5 as opposed to more formal ECE program alternatives (See Appendix D). Table 4.2 depicts ECE enrollment data for the five most common selections across the four indicators.

<sup>&</sup>lt;sup>22</sup> Survey respondents who did not report their race/ethnicity are not included in the race/ethnicity indicator, which is why the percentages for White and Person of Color do not sum to 100%.

	Childcare Center/Preschool	Family childcare home	Head Start/Early Head Start	In Home Care by Family Member	School-Based Program
All respondents	41%	28%	26%	43%	29%
White	40%	3%	32%	39%	34%
Non-White	42%	22%	19%	50%	23%
Above 200%	47%	26%	20%	46%	29%
Below 200%	37%	30%	30%	42%	30%
Northern	45%	29%	27%	40%	32%
Southern	32%	26%	23%	41%	22%
Rural	39%	35%	34%	39%	35%
Urban	43%	20%	18%	48%	23%

 Table 4.2: Early Care and Education Enrollments Among Survey Respondents

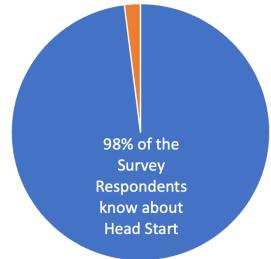
Source: Analysis of USC Parental Survey results.

As shown above in Table 4.2, respondents above 200% FPL, white respondents, and Northern Californians most often reported selecting a childcare center or preschool, although in-home care surfaced as a close second for the first two subgroups. All other subgroups most often selected in-home care. Importantly, the majority of respondents across indicators did not select Head Start or Early Head Start, suggesting that survey distribution efforts achieved some amount of success in mitigating selection bias.

## Head Start Program Knowledge

Almost all survey respondents (98 percent) had heard of Head Start or Early Head Start before, indicating that Head Start is not a well-kept secret for this sample (see Appendix D). Figure 4.3 illustrates this outcome. Other answer options included "No" and "I don't know" and are demarcated in orange in Figure 4.3.





Source: Analysis of USC Parental Survey results.

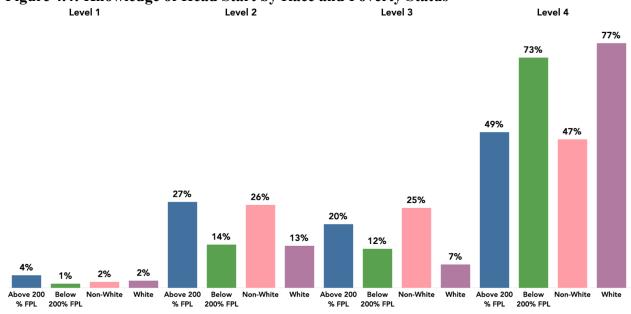
Additionally, more than 85 percent of respondents reported knowing someone involved with Head Start as a student or staff member, with more white respondents answering "Yes" to this question relative to other subgroups (see Appendix D, complete for data on this sub-question). Respondents of color surfaced as the least connected to Head Start students and staff members, with less than 80 percent reporting that they knew or had ever known someone involved.

#### Knowledge by Race and Poverty Status.

Notable disparities in program knowledge emerged across the indicators of race and poverty status for this sample population. Following initial questions about overall program knowledge and connections to Head Start students and/or staff members, respondents were asked to rank their level of familiarity with Head Start by choosing <u>one</u> of the following four options:

- 1) "I've heard of Head Start, but I don't know what they do."
- 2) "I've heard of Head Start, and I know a little bit about the program."
- 3) "I am familiar with Head Start, and I understand what the program does."
- 4) "I am very familiar with Head Start, and I know exactly what the program does."

The majority of respondents selected Levels 2-4, as demonstrated below in Figure 4.4.



#### Figure 4.4: Knowledge of Head Start by Race and Poverty Status

Source: Analysis of USC Parental Survey results.

Figure 4.4 reveals that a higher concentration of white respondents as well as respondents living in poverty selected Level 4 compared to their respective counterparts. Close to 75 percent of respondents earning below 200% FPL reported having a Level 4 familiarity with Head Start, while only half of all respondents earning above 200% FPL were as familiar with the program. An even greater disparity in Head Start knowledge emerged along racial lines: 77 percent of white respondents reported a Level 4 familiarity compared to 47 percent of respondents of color, 30 percentage points fewer. Respondents of color were split almost evenly between Level 2 and Level 3 familiarity, as were respondents below 200% FPL. Only 7 percent of white respondents reported Level 3, indicating that levels of familiarity were more polarized among white respondents compared to other subgroups.

Survey respondents were also asked to share how they learned about Head Start. Social network sites like Facebook, Instagram, and LinkedIn were the most commonly reported way that

respondents heard about it, selected by 61.8 percent of the sample (see Appendix D for table of outcomes). However, disparities also emerged, as indicated by Figure 4.5 below.

	White	Non-White	Below 200%	Above 200%
Social network sites	82%	39%	72%	47%
Friends/Family	27%	34%	33%	26%
Google/other search engine	30%	22%	26%	26%
Flyers/newspaper ads	27%	18%	26%	19%
Organization near me	23%	19%	23%	18%
Head Start Near Me	22%	16%	16%	33%

Figure 4.5: How Respondents Learned About Head Start by Race and Poverty Status

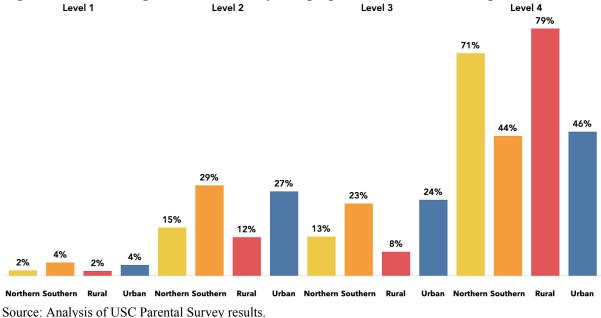
Source: Analysis of USC Parental Survey results.

The share of respondents below 200% FPL who selected social network sites (72 percent) exceeded that of higher income households (47 percent) by 25 percentage points, and the share of white respondents (82 percent) exceeded that of non-white respondents (39 percent) by more than 40 percentage points. For respondents below 200% FPL, the next most common ways of hearing about Head Start were friends and family (33 percent), Google or other search engine (26 percent), and flyers/newspaper ads (26 percent). Likewise, for respondents of color, the next most common ways were friends and family (34 percent) and Google or other search engines (22). White respondents reported higher percentages than respondents of color for every option except friends and family, implying that white respondents learned about Head Start in more ways overall than their non-white counterparts. This trend aligns with the finding shown earlier that white households reported higher levels of familiarity with Head Start programs.

#### Knowledge by Geographic Area and State Region.

Similar disparities in program knowledge also appeared when analyzing data disaggregated by geographic area and state region. Before proceeding to this analysis, however, it is important to acknowledge that the four indicators are not entirely independent from one another. Chi-tests of each indicator pair revealed that outputs for race/ethnicity, geographic area, and state region overlapped significantly in this sample (p<0.01; see Appendix G). White respondents more often resided in rural counties in Northern California, whereas respondents who identified as non-white more often resided in urban counties in Southern California. Of note, poverty status outcomes did not overlap significantly with any subgroup (p<0.05; see Appendix G).

On the following page, Figure 4.6 visualizes the levels of familiarity reported by survey respondents based on whether they reported living in a county categorized as either urban or rural, and as part of either Northern or Southern California.



#### Figure 4.6: Knowledge of Head Start by Geographic Area and State Region

As can be seen in Figure 4.6, a 27 percentage point difference in Level 4 familiarity exists between respondents in Northern California versus Southern California, and a 33 percentage point difference emerges between respondents who reside in rural versus urban counties in California. Survey respondents in rural counties appear to have the highest levels of Head Start familiarity (79 percent at Level 4) compared to all other subgroups. Respondents in Southern California and in urban counties follow mostly parallel trends, with no more than a two percentage point difference at any given level of familiarity (Levels 1-4) with Head Start or Early Head Start. Furthermore, Figure 4.7 below reveals how disparities also appeared based on these two indicators when looking at how survey respondents heard about Head Start.

	Northern California	Southern California	Urban	Rural
Social network sites	72%	35%	38%	82%
Friends/Family	31%	29%	30%	31%
Google/other search engine	27%	23%	25%	27%
Flyers/newspaper ads	28%	12%	13%	32%
Organization near me	22%	20%	19%	23%
Head Start Near Me	21%	15%	17%	21%

#### Figure 4.7: How Respondents Learned About HS by Geographic Area and State Region

Source: Analysis of USC Parental Survey results.

The share of respondents in Northern California who selected social network sites (72 percent) exceeded that of Southern Californians (35 percent) by 37 percentage points, and the share of rural respondents (82 percent) exceeded that of urban respondents (38 percent) by more than 40 percentage points. It is also important to note that the share of Northern Californians who heard about Head Start via social network sites matches the share of respondents below 200% FPL, and the share of rural respondents matches the share of white respondents (refer back to Figure 4.5 for comparison). For Northern and rural Californians, other common ways were friends and family (31 percent) and Google or other search engines (27 percent). As the data demonstrates, proximity to a Head Start site on its own does not stand out as a common way that respondents heard about the federally subsidized program.

#### **Open-Ended Comments From Respondents.**

Some respondents elected to provide additional comments in an optional, open-ended question at the end of the survey. A total of 73 respondents wrote text in this field, of which 25 provided substantive comments (see Appendix E for a full table of responses). Two of these respondents used this text field to comment further on themes pertaining to Head Start knowledge:

"Early Head Start needs to be promoted more."

- Latino, bilingual male (Spanish and English) between 35-44 years old, living under 200% FPL and receiving no benefits in Los Angeles County

"Head Start could definitely use additional advocacy for its program."

- White, monolingual female (English) between 25-34 years old, living above 200% FPL and receiving CalFresh in Butte County

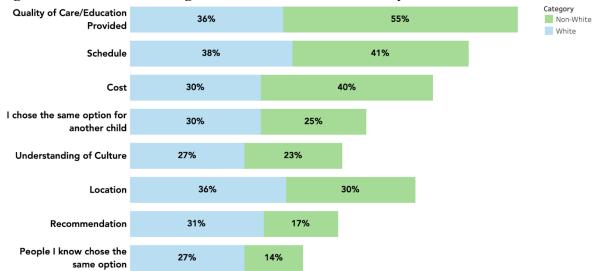
These two respondents are united in their requests for additional promotion and advocacy of Head Start programs despite having no demographic traits in common. This small sampling foreshadows how efforts to increase knowledge of Head Start and Early Head Start in California could impact households from a diverse array of backgrounds.

#### **Decision-Making Factors in Early Care and Education**

Another primary objective of the survey product was to deepen understanding of how parents and guardians in California choose which ECE program will be best for their children, and which factors most heavily influence that decision. To collect data on this decision-making process, the survey instrument asked respondents to select up to three (3) of the most influential factors from a list of eight (8) available options in addition "I don't know" and "Other" (see survey instruments in Appendix I for full list of response options). The most important factor overall according to parents and guardians surveyed was program quality (n=250). Nearly 45 percent of respondents selected "quality of the care and/or education provided" as among the top three most influential factors influencing their ECE decisions. Between 33-40 percent of respondents denoted schedule alignment, cost, and proximity as among the top three most influential factors, and between 24-28 percent included previous program use, cultural competency, and recommendations from trusted individuals as top factors (see Appendix D for table of outcomes).

#### Factors by Race and Poverty Status.

Program quality surfaced as more influential for parents and guardians of color compared to their white counterparts by a margin of nearly 20 percentage points, as evidenced below in Figure 4.8.

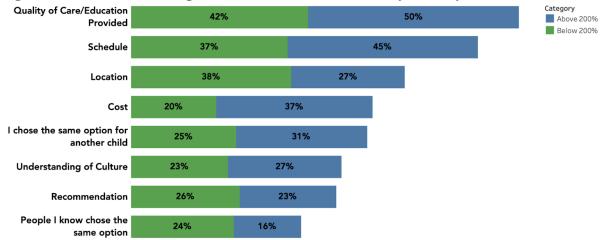


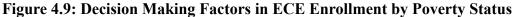


Source: Analysis of USC Parental Survey results.

White parents in the sample seem more focused on reputational factors than parents of color according to data displayed in Figure 4.8. Whereas more than half (55 percent) of respondents of color selected "quality of the care and/or education provided," only 36 percent of white respondents did the same. Additionally, higher shares of respondents of color selected "this option worked well with my schedule" and "cost" relative to white parents, with a notable 10 percentage point difference for the influence of cost (see "schedule" and "cost" in Figure 4.8). Meanwhile, a higher share of white respondents selected "this option is located close to me" and "this option was recommended by someone I trust" compared to respondents of color (see "location" and "recommendation" in Figure 4.8). Parents and guardians of color appear more willing to travel for an ECE program that aligns with their scheduling and budgeting needs, whereas white parents appear to be more reliant on social networks in making ECE decisions.

Respondents above and below 200% FPL saw a smaller gap in selection of quality as compared to the racial/ethnic indicator. Relatively higher income households (50 percent) listing program quality as a top factor compared to lower income households (42 percent). However, this difference of eight percentage points is unlikely to be statistically significant. A greater share of respondents above 200% FPL selected "this option worked well with my schedule" (45 percent) and "cost" (37 percent) relative to respondents living in poverty, but a greater share of respondents living in poverty selected "this option is located close to me" (38 percent) relative to their higher income counterparts (27 percent). Figure 4.9 illustrates these findings in detail.





Source: Analysis of USC Parental Survey results.

Findings depicted in Figure 4.9 suggest that Head Start-eligible families in the sample are more likely to consider proximity when choosing an ECE program, which underscores the importance of the spatial analysis findings discussed previously in this analysis. It seems surprising that the share of families above 200% FPL selecting "cost" leads by 16 percentage points. However, this difference could potentially be explained by the high costs of ECE programs and the paucity of subsidies available to families just above 200% FPL compared to Head Start-eligible families. Of note, higher income and white respondents selected "this option helps my child understand his/her culture compared to their respective counterparts (see "Understanding of Culture" in Figures 4.8 and 4.8) The project team hypothesized that the cultural competency factor would be more influential for parents of color, so this outcome differs from expectations, although it may not be statistically significant.

#### Factors by Geographic Area and State Region.

Figure 4.10 below illustrates outcomes in decision-making factors based on geographic area:

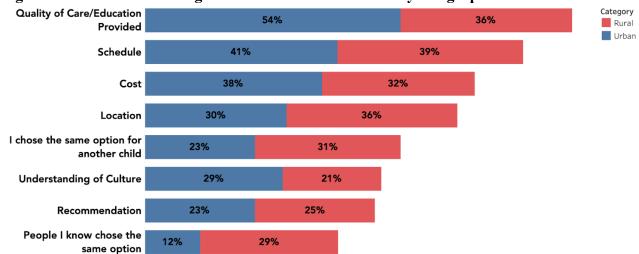


Figure 4.10: Decision Making Factors in ECE Enrollment by Geographic Area

Source: Analysis of USC Parental Survey results.

Program quality appeared to be the most important factor for respondents living in urban counties, with over half (54 percent) selecting "quality of care and/or education provided" as compared to respondents in rural counties at 36 percent, at a difference of nearly 20 percentage points. Conversely, schedule alignment surfaced as the most important factor for respondents in rural counties (39 percent), followed by program quality and location tied at 36 percent. For respondents in urban counties, the factors that emerged in second and third place were scheduling alignment and cost. After program quality (18 percentage points), the largest gap between urban and rural respondents surfaced for the reputation-based factor of "People I know chose the same option" (17 percentage points).

Overall, the trends illustrated in Figure 4.10 imply that while program quality is important for parents and guardians in rural counties, location and scheduling play an equal if not greater role in selecting an ECE program. Rural families may have to travel farther on average for ECE services and/or coordinate household activities at a greater distance, so a high quality program offering may not be feasible due to constraints with scheduling and proximity. In other words, parents and guardians may have fewer options to choose from once distance and time are taken into consideration. This reasoning helps to explain why respondents in rural counties seem more inclined to reuse an ECE program selected for a previous child instead of seeking an alternative.

Lastly, Figure 4.11 below visualizes data on top ECE decision-making factors based on whether respondents live in Northern or Southern California.

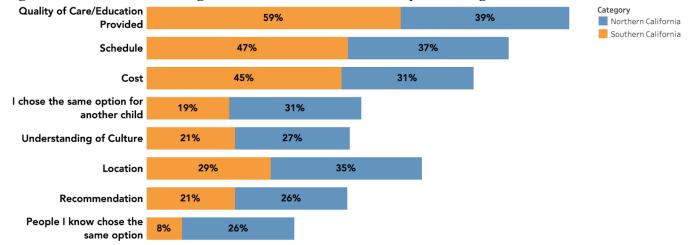


Figure 4.11: Decision Making Factors in ECE Enrollment by State Region

Source: Analysis of USC Parental Survey results.

Program quality once again surfaced as the most influential factor for survey respondents, but this time a 20 percentage point difference emerged between residents of Southern versus Northern California. The second largest gap surfaced between subgroups for "People I know chose the same option", with Northern Californians leading by 18 percentage points. Scheduling alignment was the second most chosen factor for both groups at 47 percent for Southern Californians and 37 percent for Northern Californians. From there, the subgroups diverge: Northern Californians rank location before cost, whereas Southern Californians rank cost before location. Overall, Northern Californians were more evenly distributed across options.

#### **Open-Ended Comments from Respondents.**

Several open-ended comments further illuminated which decision-making factors influence ECE decisions for respondents in the sample. One response from a white female living above 200% FPL in Merced County crystallized how scheduling alignment can take precedence over other factors: "when our youngest was Head Start age, we would have financially qualified, but the hours of operation didn't meet our needs." Another response from a white female living above 200% FPL in Ventura county elevated the importance of proximity: "There are not many early childhood options available in my area." A few respondents clarified why they chose in-home care, citing the importance of trust, convenience, and building connections with family members.

A number of these 25 dedicated survey respondents expressed a desire for Head Start programming to be universally available regardless of income, or at least less socioeconomically restricted, such as the one below from a white female living above 200% FPL in Solano County:

Even though we don't qualify on paper, because we have to pay full price for housing, medical, food, childcare and many other things that low income families qualify for assistance, we are struggling financially each month.

This comment underscores the ECE cost burden endured by households across income levels.

#### **Summary of Key Findings and Themes**

Survey respondents overall reported having at least a baseline familiarity with Head Start programs, but the depth and breadth of this familiarity varied widely by the four indicators of race/ethnicity, poverty status, geographic area, and state region. Respondents most commonly heard about Head Start from social network sites regardless of identity, income, or county of residence. However, white respondents, rural respondents, and Northern Californians-subpopulations that overlap significantly-reported higher rates of learning about Head Start across every option. In terms of decision-making, rural respondents and respondents living below 200% FPL appeared more likely to consider proximity when choosing an ECE program than their respective counterparts. This finding underscores the value of spatial analysis and identifying which census tracts in California have the greatest barriers to physical accessibility of Head Start program sites. At the same time, proximity to a program site did not surface as a primary way that respondents heard about Head Start, implying that the creation of new program sites will not on its own guarantee that families living nearby will hear about-and enroll their children in-the program.

These survey findings differ somewhat from previous studies presented in earlier sections of this analysis. For example, a Louisiana-based study cited in the literature review found that peer-to-peer and other local networks mattered more than online information regarding promotion of ECE programs to parents, whereas this survey suggests that online information is more important (Bassok et al., 2018). This difference would seem to suggest that the ways parents most often hear about ECE programs varies based on the sample population. Another explanation could be that these 251 individuals are more categorically comfortable with using the internet than their peers considering that the survey was only conducted online. Meanwhile, this survey supports the peer-reviewed finding that factors largely out of the ECE provider's control, such as convenience in scheduling and proximity, may be the most influential.

## **V. FURTHER DISCUSSION OF FINDINGS AND POLICY IMPLICATIONS**

#### **Implications of Spatial Analysis Findings**

While the research shows that the estimates of eligible children for Head Start outstrips the supply of Head Start by a magnitude greater than eight, these are not actual demand; rather, the estimates are potential demand of eligible children under 5. Not all eligible families and children will seek Head Start services. This is likely because there exists a lack of knowledge, access barriers, and other ECE programs in California. The supply and demand analysis does not take into account other ECE programs available to serve the needs of eligible children living in or near poverty. For example, transitional kindergarten and preschool programs. These other ECE programs and services are absent in this paper's estimations.

This paper's estimations are a snapshot of the condition of eligible children under 5 living in or near poverty in 2021, not a forecast estimate of future trends. Given that child poverty trends are declining, this could signal a shrinking gap found in the supply and demand analysis. In other words, demand for ECE services could decline over time as child poverty declines. Moreover, birth rate trends are declining in California, which could signal a further decline of ECE needs. However, this does not account for immigration to California of foreign-born families and immigrant children who could be eligible for Head Start services.

The significant gaps and inequitable access found in the supply and demand analysis are not an indictment of Head Start and its ability. This research paper does not consider the cause. There are likely numerous factors that go into the placement of Head Start locations that are not considered in the supply and demand analysis. This research describes the condition.

#### **Recommendations.**

Head Start program providers meet some of the need, but opportunities for improvement exist. Head Start California could:

- 1. Share these findings with its members and other relevant stakeholders to inform efforts to relocate or establish new program sites, especially in those counties with the highest demand to supply ratios and in those census tracts without reasonable access or with high competition.
- 2. Conduct additional research on community-specific needs. Significant gaps in servicing are more visible at the granular level, such as census tracts, than at the aggregate level, such as the county. In developing expansion strategies, carefully consider the identified variations in the potential impact of CalFresh eligibility in each county. This additional research could be done through research projects with academia, like USC, or non-profit organizations specializing in ECE program research.
- 3. Conduct additional research to understand the supply of other ECE programs in California, such as Transitional Kindergarten, and measure the need of Head Start services with a complete picture of the ECE supply.

#### **Implications of Parental Survey Findings**

Survey findings suggest that Head Start is not "a well-kept secret" given that nearly all respondents reported some knowledge of Head Start, and only a small percentage reported having Level 1 of familiarity. However, it is important to recognize that this sample population is not representative of all parents and guardians in California, so results cannot be generalized to the whole state. The project team made a significant effort to distribute the survey to parents and guardians who may have not heard about Head Start to bolster external validity as much as possible. For example, the client did not distribute the survey through their channels nor to Head Start program sites. Doing so would introduce selection bias due to surveying an influx of families highly familiar with Head Start. Nonetheless, external validity still cannot be assumed given that these 251 individuals represent a small fraction of the true parental population in CA.

Illegitimate survey responses surface as the primary threat to internal validity of the survey. The project team confirmed that at least 1,000 bot responses were submitted, and the process of removing bot responses is an imperfect science. The project team conducted an extensive survey data cleaning process and removed responses based on certain signals, but an illegitimate response still could have been analyzed in the final sample population. Clearly, offering monetary incentives for survey completion creates an important tradeoff. While incentives can help encourage more respondents to participate in the survey, they can also motivate others to use bots for personal gain. The project team felt strongly about using monetary incentives to encourage participation from this difficult-to-reach population, but doing so also undermined the internal validity of the survey findings.

#### **Recommendations.**

While survey data collected from this sample is only suggestive, we have some actionable recommendations. Head Start California could:

- 1. Make a greater effort to reach households of color. This could occur through partnering with organizations like WIC who provide a non-competing service. Another approach would be to explore opportunities to diversify the Head Start pipeline as friends and family were the second most frequent way people heard of Head Start.
- 2. Leverage social networking sites extensively for marketing around categorical eligibility for CalFresh recipients and for promotion of services in general.
- 3. HSC could explore opportunities to help serve middle income families, who may not qualify for services, in tandem with low-income households. In addition, HSC could help program sites seek additional funding to over tiered cost programs for families who could not qualify.

In closing, the project team recommends that the client collaborate with these and other survey distribution partners to administer this survey on a semi-regular basis. Administering a parental survey more regularly will enable the client to test the external validity of the project team's findings and gather data from an increasingly broader and more representative sample.

#### **VI. CONCLUSIONS**

Head Start provides critical early care and education for children under five years old living in and near poverty throughout the United States. In California, too many children living in poverty experience disparities in health, education, and employment outcomes. Education can be a positive driver out of poverty, but many low-income families and children lack the necessary resources to take advantage of it. The need for ECE in California outstrips the supply of Head Start programs and enrollment slots by a magnitude of four when taking into account the recent expansion of categorical eligibility to include CalFresh recipients. In many cases, the need doubled throughout counties. In addition, many counties have high proportions of children under five living in or near poverty. Head Start locations are unevenly distributed throughout some counties and offer inequitable access to its population most in need. Head Start locations were present in census tracts with little need relative to other tracts, while those tracts with the greatest number of eligible children in need had few enrollment slots within 3 miles. Additionally, racial disparities in Head Start knowledge must be addressed to ensure equitable service provision. With the recent expansion of Head Start eligibility, Head Start California has a unique opportunity to address access and knowledge barriers demonstrated in this spatial and survey analysis that persist for low-income households of color and ensure that the program's expansion achieves more equitable outcomes across California's counties.

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### **APPENDIX A: SURVEY DISTRIBUTION PARTNERS**

- 1. California WIC Association: California WIC Association is a non-profit in California whose goals include: promoting WIC and public health, breastfeeding advocacy particularly among low income women and modernizing WIC. <u>https://www.calwic.org</u>
- 2. California Child Care Resource and Referral Network (CCRR): CCRR is a non-profit operating for over 40 years committed to providing quality child care to low-income families providing programs such as family engagement, workforce development and even running five head start centers. <u>https://rrnetwork.org</u>
- 3. Parent Voices: Parent Voices is an organization that centers parents in their advocates for reform in childcare; some goals of Parent Voice include more investment and equitable access to childcare. <u>https://www.parentvoices.org</u>
- 4. First 5 California: First 5 California is an organization whose mission is to provide support to families in the first five years in a child's life; this includes nutrition support, early literacy and language development and smoking cessation for parents and caregivers. <u>https://www.first5california.com/en-us/</u>
- 5. United Way California: United Way is an organization working to ensure access for low-income families have the necessary tools for success focusing on these priority areas: Heath, Education and Income. <u>https://www.unitedwaysca.org</u>
- 6. Children Now: Children now is an organization that takes a whole-child approach, newborn to age 26, advocating for a full range of issues such as childhood trauma, education, and early childhood development. Children Now works to children particularly children of color and children in poverty to reach their full potential destroying the barriers in their way. <a href="https://www.childrennow.org">https://www.childrennow.org</a>
- 7. Families in Schools (FIS): The goal of FIS is to involve parents in children's education and lifelong success. FIS works to build these bonds between communities and schools by providing programs that develop authentic relationships such educator training to cultivate parent engagement, parent engagement programs such as growth mindset and college preparation and advocacy. <u>https://www.familiesinschools.org</u>
- 8. Early Edge California: Early Edge California advocates for quality ECE programs through actions such as increased compensation for teachers and investing in professional development (Early Edge California, 2021a). Additional priorities for Early Edge California to increase the quality of ECE programs include the success of dual language learners, increase availability of high quality programs for children until age of eight, and Transitional Kindergarten (TK). <a href="https://earlyedgecalifornia.org">https://earlyedgecalifornia.org</a>

## **APPENDIX B: ABBREVIATIONS AND ACRONYMS**

- ACS American Community Survey
- CPM California Poverty Measure
- ECE Early Care and Education
- FPL Federal Poverty Level
- ID Identification Number
- PPIC Public Policy Institute of California
- RCRC Rural County Representatives of California
- SNAP Supplemental Nutrition Assistance Program

#### California Demand to 3 Mi Slots Visalia Hanford Ratio Valley 0.00 - 1.00 (39) Huron Tulare 1.01 - 5.00 (74) 5.01 - 10.00 (44) Porterville Mountai 10.01 - 15.00 (7) Avenal 15.01 - 31.35 (17) 9988 f ins <out of range> (0) San Kern\_HSsites\_Buffer3 (1) JO 53 52.07 46.05 52.08 55.09 55.10 39 El Paso 51.03 52.06 52.03 ountains 66 51.04 38.27 38.23 Vastal Range 33.04 65 60.04 60.09 55.0 33.03 59 395 60.12 60.11 33.07 57 55.14 Antelope Valley California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, Esri, NASA, NGA, USGS Lancaster Los Padres

# **APPENDIX C: ADDITIONAL MAPS**

Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

In Kern County, in 2021, approximately 3% of all eligible children of Head Start had access to a Head Start location within 3 miles. Approximately 89% of all eligible children had access within 3 miles but had to share or compete for enrollment slots. Approximately 8% of all eligible children had no access to Head Start services within 3 miles.

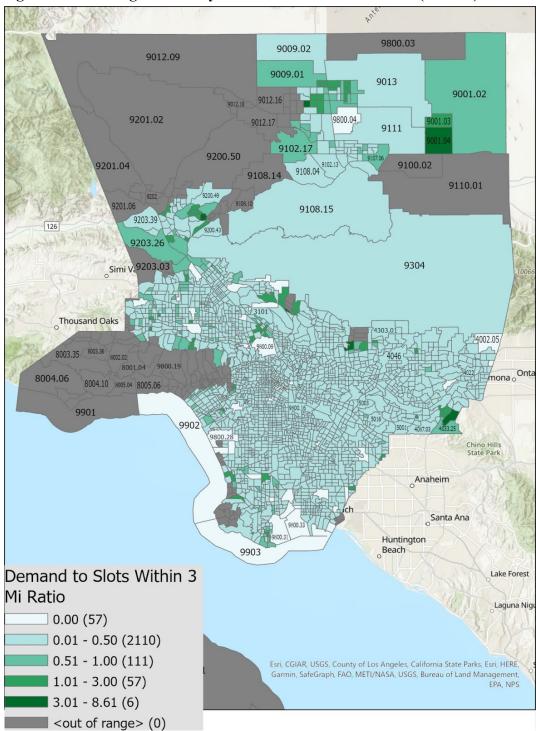
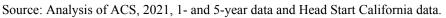
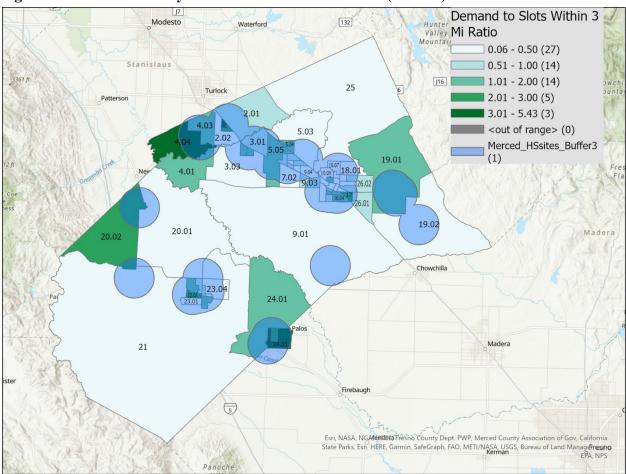
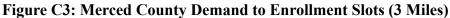


Figure C2: Los Angeles County Demand to Enrollment Slots (3 Miles)



In Los Angeles County, in 2021, approximately 93% of all eligible children of Head Start had access to a Head Start location within 3 miles. Approximately 5% of all eligible children had access within 3 miles but had to share or compete for enrollment slots. Approximately 2% of all eligible children had no access to Head Start services within 3 miles.





Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

In Merced County, in 2021, approximately 42% of all eligible children of Head Start had access to a Head Start location within 3 miles. Approximately 58% of all eligible children had access within 3 miles but had to share or compete for enrollment slots. Approximately 0% of all eligible children had no access to Head Start services within 3 miles.

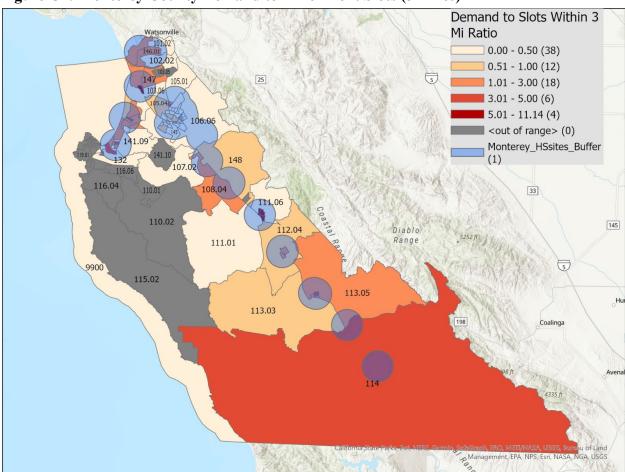


Figure C4: Monterey County Demand to Enrollment Slots (3 Miles)

Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

In Monterey County, in 2021, approximately 44% of all eligible children of Head Start had access to a Head Start location within 3 miles. Approximately 53% of all eligible children had access within 3 miles but had to share or compete for enrollment slots. Approximately 3% of all eligible children had no access to Head Start services within 3 miles.

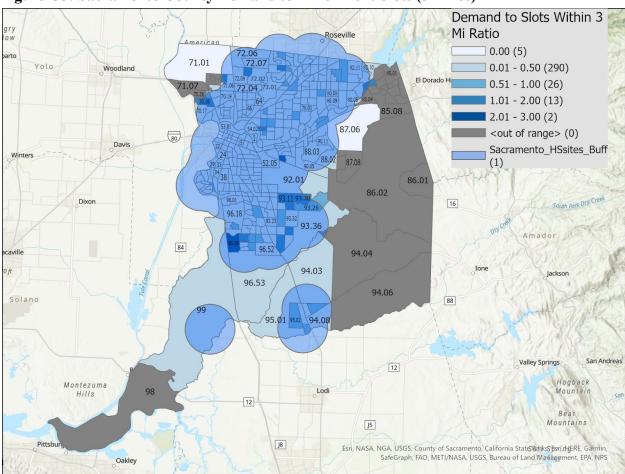


Figure C5: Sacramento County Demand to Enrollment Slots (3 Miles)

Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

In Sacramento County, in 2021, approximately 90% of all eligible children of Head Start had access to a Head Start location within 3 miles. Approximately 7% of all eligible children had access within 3 miles but had to share or compete for enrollment slots. Approximately 3% of all eligible children had no access to Head Start services within 3 miles.

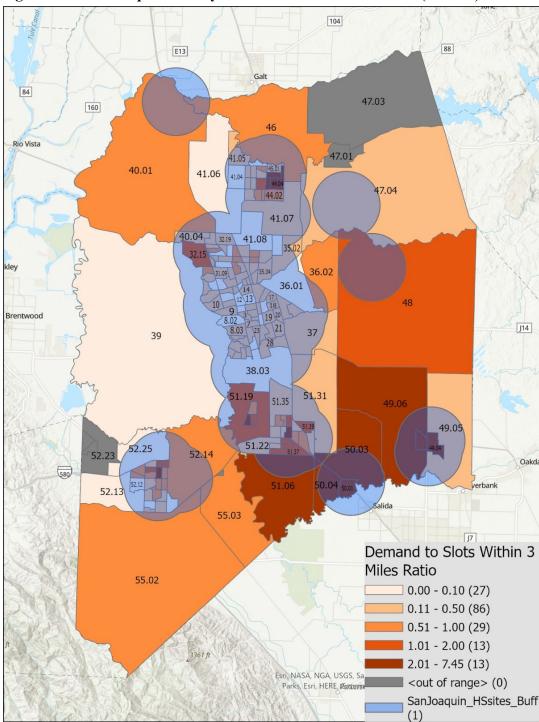


Figure C6: San Joaquin County Demand to Enrollment Slots (3 Miles)

Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

In San Joaquin County, in 2021, approximately 74% of all eligible children of Head Start had access to a Head Start location within 3 miles. Approximately 25% of all eligible children had access within 3 miles but had to share or compete for enrollment slots. Approximately 1% of all eligible children had no access to Head Start services within 3 miles.

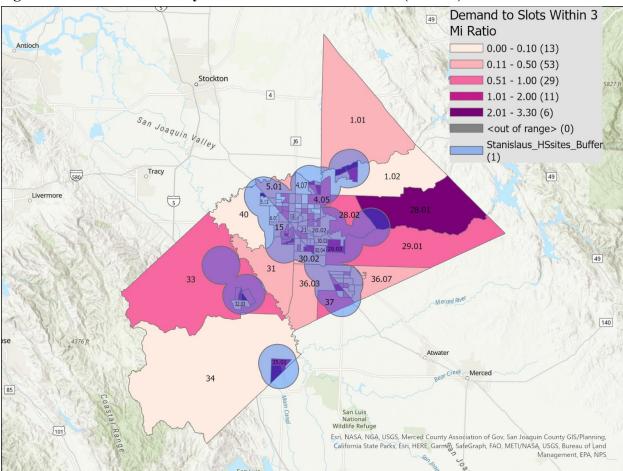


Figure C7: Stanislaus County Demand to Enrollment Slots (3 Miles)

Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

In Stanislaus County, in 2021, approximately 72% of all eligible children of Head Start had access to a Head Start location within 3 miles. Approximately 28% of all eligible children had access within 3 miles but had to share or compete for enrollment slots. Approximately 0% of all eligible children had no access to Head Start services within 3 miles.

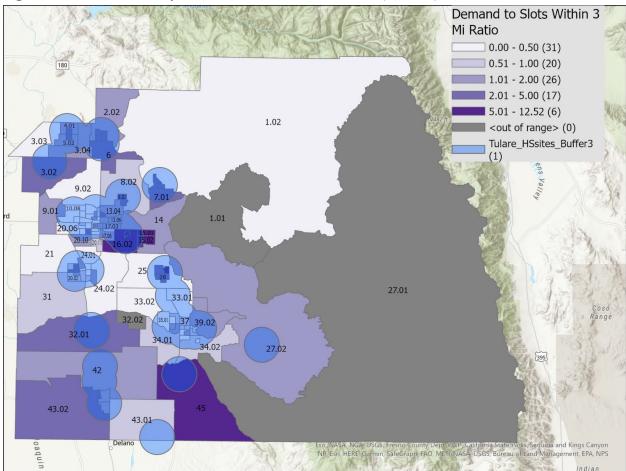


Figure C8: Tulare County Demand to Enrollment Slots (3 Miles)

Source: Analysis of ACS, 2021, 1- and 5-year data and Head Start California data.

In Tulare County, in 2021, approximately 28% of all eligible children of Head Start had access to a Head Start location within 3 miles. Approximately 71% of all eligible children had access within 3 miles but had to share or compete for enrollment slots. Approximately 1% of all eligible children had no access to Head Start services within 3 miles.

## **APPENDIX D: SURVEY DATA TABLES**

N = 251	Percent	N
Age		
18-24	1.6%	4
25-34	17.5%	44
35-44	74.9%	188
45-54	4.8%	12
55-64	1.2%	3
Gender		
Female	64.5%	162
Male	35.5%	89
Household size		
2 people	3.6%	ç
3 people	27.1%	68
4 people	35.9%	90
5 people	29.5%	74
6 people	2.8%	,
7 people	0.4%	1
8+ people	0.8%	
Poverty status	0.870	4
Above 200% FPL	40.2%	101
Below 200% FPL	40.278 59.8%	15
	39.8%	130
Geographic area <sup>&gt;</sup>	47 00/	120
Urban county	47.8%	120
Rural county	52.2%	131
State region	70.00/	1.70
Northern California	70.9%	178
Southern California	29.1%	73
Race/ethnicity <sup>+</sup>		
White/Caucasian	53.8%	135
Asian American/Pacific Islander		22
Black/African American	11.6%	29
American Indian/Alaskan	2.0%	4
Native		_
Hispanic/Latino	22.3%	56
Multiracial	1.2%	
Prefer not to answer	2.0%	4
Language(s) spoken at home <sup>+</sup>		
English	96.0%	241
Spanish	19.5%	49
Chinese	0.8%	2
Vietnamese	0.8%	2
Tagalog/Filipino	1.2%	3
Indonesian	0.4%	1
French	0.4%	1
Total	100%	251

**Table D1: Descriptive Characteristics of Sample Population** 

<sup>5</sup> Delineation rural categories based on counties represented by the Rural County Representatives of California (RCRC).
 <sup>+</sup> Percentages do not sum to 100% due to multiselect option.

N = 251	Percent	N
Household income		
\$0 - \$10,000/year	2.8%	7
\$10,001 - \$20,000/year	2.8%	7
\$20,001 - \$30,000/year	2.0%	5
\$30,001 - \$40,000/year	4.8%	12
\$40,001 - \$50,000/year	21.5%	54
\$50,001 - \$60,000/year	15.9%	40
\$60,001 - \$70,000/year	15.1%	38
\$70,001 - \$80,000/year	6.0%	15
\$80,001 - \$90,000/year	7.8%	19
\$90,001 - \$100,000/year	7.3%	18
More than \$100,000/year	14.3%	36
Public benefits <sup>+</sup>		
CalWORKS	14.3%	36
SNAP/CalFresh	27.9%	70
Supplemental Security Income	10.0%	25
Women, Infants and Children	15.5%	39
Section 8	2.0%	5
MediCal / MediCaid	13.9%	35
None of the above	25.1%	63
I don't know	0.8%	2
Prefer not to answer	2.0%	5
At least one benefit	71.3%	179
Total	100%	251
	1.	11 1

Table D2: Household Income and Public Benefits Received

<sup>+</sup> percentages do not sum to 100% because respondents were allowed to select multiple options.

N = 251	Percent	Ν
Alameda	3.6%	9
Alpine	2.0%	5 3
Amador	1.2%	
Butte	1.6%	4
Calaveras	1.2%	3
Colusa	0.4%	1
Contra Costa	1.6%	4
El Dorado	0.8%	2
Fresno	3.2%	8
Glenn	3.2%	8
Humboldt	0.8%	2
Imperial	0.4%	1
Inyo	0.8%	2
Kern	1.6%	4
		4
Kings	1.2%	3
Lake	1.2%	
Lassen	2.8%	7
Los Angeles	12.4%	31
Madera	0.4%	1
Marin	0.4%	1
Mariposa	0.4%	1
Mendocino	1.2%	3
Merced	2.0%	5
Modoc	1.2%	3
Mono	2.4%	6
Monterey	2.0%	5
Napa	0.8%	2
Nevada	1.2%	3
Orange	0.8%	2
Placer	1.2%	3
Plumas	0.4%	1
Riverside	4.4%	11
Sacramento	2.0%	5
San Benito	2.0%	5
San Bernardino	2.0%	5
		3 7
San Diego	2.8%	
San Francisco	2.4%	6
San Joaquin	0.4%	1
San Luis Obispo	2.0%	5
San Mateo	1.2%	3
Santa Barbara	1.2%	3
Santa Clara	4.8%	12
Santa Cruz	1.6%	4
Shasta	1.2%	3
Sierra	0.4%	1
Siskiyou	0.8%	2
Solano	2.8%	7
Sonoma	3.2%	8
Stanislaus	1.2%	
Sutter	1.2%	3 3
Tehama	0.8%	2
Trinity	0.8%	2
Tulare	0.8%	2
Tuolumne		1
	0.4%	
Ventura	1.6%	4
Yolo	1.6%	4
Yuba	2.4%	6
Total	100.00	251

 Table D3: Counties of Residence for Sample Population

	Percent	N
"Yes, I have heard of Head Start"		
All respondents (n=251)	98%	246
White (n=135)	100%	135
Non-white (n=111)	97.3%	108
Above 200% FPL (n=101)	98.0%	99
Below 200% FPL (n=150)	98.0%	147
Northern California (n=178)	99.4%	177
Southern California (n=73)	94.5%	69
Urban (n=120)	95.8%	115
Rural (n=131)	100%	131
Someone I know has been involved with Head S	tart as a student or staff memb	er"
All respondents (n=241)	85.9%	207
White (n=132)	91.7%	121
Non-white (n=106)	79.2%	84
Above 200% FPL (n=96)	81.3%	78
Below 200% FPL (n=145)	89.0%	129
Northern California (n=174)	90.2%	157
Southern California (n=67)	74.6%	50
Urban (n=112)	77.7%	87
Rural (n=129)	93.0%	120
Total	100%	251

Table D4: Head Start Familiarity and Connections for Sample

Note: Not all respondents answered both questions, which is why n varies. Five respondents chose not report their race/ethnicity in the survey, so those five observations are excluded from the white and non-white subgroup analyses.

	Percent	N
Level 1: "I've heard of Head Start, but I don't k	now what they do"	
All respondents (n=246)	2.4%	6
White (n=135)	2.2%	3
Non-white (n=107)	1.9%	2
Above 200% FPL (n=146)	4.0%	4
Below 200% FPL (n=100)	1.4%	2
Northern California (n=176)	1.7%	3
Southern California (n=70)	4.3%	3
Urban (n=116)	3.5%	4
Rural $(n=130)$	1.5%	2
Level 2: "I've heard of Head Start, and I know a	a little bit about the program"	
All respondents	19.1%	47
White	13.3%	18
Non-white	26.2%	28
Above 200% FPL	27.0%	27
Below 200% FPL	13.7%	20
Northern California	15.3%	27
Southern California	28.6%	20
Urban	26.7%	31
Rural	12.3%	16
Level 3: "I am familiar with Head Start, and I u	nderstand what the program doe	s"
All respondents	15.5%	38
White	7.4%	10
Non-white	25.2%	27
Above 200% FPL	20.0%	20
Below 200% FPL	12.3%	18
Northern California	12.5%	22
Southern California	22.9%	16
Urban	24.1%	28
Rural	7.7%	10
Level 4: "I am very familiar with Head Start, ar does"	nd I know exactly what the progr	am
All respondents	63.0%	155
White	77.0%	104
Non-white	46.7%	50
Above 200% FPL	49.0%	49
Below 200% FPL	72.6%	106
Northern California	70.5%	124
Southern California	44.3%	31
Urban	45.7%	53
Rural	78.5%	102
Total	100%	251

### Table D5: Levels of Head Start Familiarity for Sample

Note: Five respondents chose not report their race/ethnicity in the survey, so those five observations are excluded from the white and non-white subgroup analyses.

The same number of respondents across subgroups answered each question related to familiarity level, so those n values are only listed once.

Respondents were allowed to select only one of the four level options, and percentages sum to 100% by subgroup (i.e., white respondents, respondents below 200% FPL).

	Percent	N
Social network sites (Facebook, Instagram, LinkedIn)		
White (n=135)	81.5%	110
Non-white (n=107)	39.2%	42
Above 200% FPL (n=100)	47.0%	47
Below 200% FPL (n=146)	71.9%	105
Northern California (n=177)	72.3%	128
Southern California (n=69)	34.8%	24
Urban (n=115)	38.3%	44
Rural (n=131)	82.4%	108
Friends and family		
White	27.4%	37
Non-white	33.6%	36
Above 200% FPL	26.0%	26
Below 200% FPL	32.9%	48
Northern California	30.5%	54
Southern California	29.0%	20
Urban	29.6%	34
Rural	30.5%	40
	30.376	40
Google or other internet search	20 (0/	40
White New subject	29.6%	40
Non-white	22.4%	24
Above 200% FPL	26.0%	26
Below 200% FPL	26.0%	38
Northern California	27.1%	48
Southern California	23.2%	16
Urban	25.2%	29
Rural	26.7%	35
Flyers/newspaper ads		
White	27.4%	37
Non-white	17.8%	19
Above 200% FPL	19.0%	19
Below 200% FPL	26.0%	38
Northern California	27.7%	49
Southern California	11.6%	8
Urban	13.0%	15
Rural	32.1%	42
Through an organization near where I live		
White	23.0%	31
Non-white	18.7%	20
Above 200% FPL	18.0%	18
Below 200% FPL	23.3%	34
Northern California	21.5%	38
Southern California	20.3%	14
Urban	19.1%	22
Rural	22.9%	30
There is a Head Start location near me	22.976	50
White	22.2%	30
Non-white	15.9%	17
Above 200% FPL	33.0%	23
Below 200% FPL	33.0% 16.4%	-
		24
Northern California	20.9%	37
Southern California	14.5%	10
Urban	16.5%	19
Rural	21.4%	28

Table D6: How Survey Respondents Learned of Head Start

Note: Not five respondents in the sample did not answer this question. N values listed once for simplicity. Percentages do not sum to 100% because respondents were allowed to select as many response options as were applicable.

	Percent	Ν
School-based program (such as TK / preschool on an elem	entary school site)	
All respondents (n=250)	29.2%	73
White (n=135)	34.1%	40
Non-white (n=110)	22.7%	2:
Above 200% FPL (n=101)	28.7%	29
Below 200% FPL (n=149)	29.5%	44
Northern California (n=177)	32.2%	5
Southern California (n=73)	21.9%	10
Urban (n=120)	23.3%	28
Rural (n=130)	34.6%	4
Head Start or Early Head Start	51.070	
All respondents	26.0%	6
White	31.9%	4
Non-white	19.1%	2
Above 200% FPL	19.1%	2
Below 200% FPL	30.2%	4:
Northern California		4.
	27.1%	
Southern California	23.3%	1'
Urban	17.5%	2
Rural	33.8%	44
Childcare center or preschool	10.00/	4.0
All respondents	40.8%	102
White	40.0%	54
Non-white	41.8%	4
Above 200% FPL	46.5%	4'
Below 200% FPL	36.9%	5:
Northern California	44.6%	7
Southern California	31.5%	2.
Urban	42.5%	5
Rural	39.2%	5
Family childcare home		
All respondents	28.0%	70
White	3.0%	44
Non-white	21.8%	24
Above 200% FPL	25.7%	20
Below 200% FPL	29.5%	44
Northern California	28.8%	5
Southern California	26.0%	19
Urban	20.0%	24
Rural	35.4%	40
n-home care by parents, family members or friends	00.170	
All respondents	43.2%	10
White	38.5%	52
Non-white	50.0%	5:
Above 200% FPL	45.5%	40
Below 200% FPL	41.6%	62
Northern California		6. 7(
	39.5%	
Southern California	41.2%	30
Urban	48.3%	58
Rural	38.5%	50

Table D7: ECE Programs Used by Survey Respondents
Table D7: ECE Programs Used by Survey Respondents

Note: One respondent did not answer this question. Percentages do not sum to 100% because respondents could select all applicable options. N values are listed once.

	Percent	N
"Quality of the care and/or education provided"	Tereent	1
White (n=135)	35.6%	48
Non-white (n=110)	54.5%	60
Above 200% FPL (n=101)	49.5%	50
Below 200% FPL (n=149)	41.6%	62
Northern California (n=177)	39.0%	69
Southern California (n=73)	58.9%	43
Urban (n=120)	54.2%	65
Rural $(n=120)$	36.2%	47
"This option worked well with my schedule"	50.270	4/
White	37.8%	51
Non-white	40.9%	45
Above 200% FPL	40.9%	43 45
Below 200% FPL	36.9%	43 55
Northern California	37.3%	
		66
Southern California	46.6%	34
Urban	40.8%	49
Rural "Cost"	39.2%	51
White	20 40/	41
	30.4%	41
Non-white	40.0%	44
Above 200% FPL	36.6%	37
Below 200% FPL	20.1%	50
Northern California	30.5%	54
Southern California	45.2%	33
Urban	37.5%	45
Rural	32.3%	42
"This option is located close to me"		10
White	36.3%	49
Non-white	30.0%	33
Above 200% FPL	26.7%	27
Below 200% FPL	37.6%	56
Northern California	35.0%	62
Southern California	28.8%	21
Urban	30.0%	36
Rural	36.2%	47
"I chose the same option for another child"		
White	30.4%	41
Non-white	24.5%	27
Above 200% FPL	30.7%	31
Below 200% FPL	24.8%	37
Northern California	30.5%	54
Southern California	19.2%	14
Urban	23.3%	28
Rural	30.8%	40
"This option allows my child to better understand his/	her culture"	
White	26.7%	36
Non-white	22.7%	25
Above 200% FPL	26.7%	27
Below 200% FPL	22.8%	35
Northern California	26.6%	47
Southern California	20.5%	15

# Table D8: Most Influential ECE Decision-Making Factors for Sample

Rural	20.8%	27
"Recommended by someone I trust"		
White	31.1%	42
Non-white	17.3%	19
Above 200% FPL	22.7%	23
Below 200% FPL	25.5%	38
Northern California	26.0%	46
Southern California	20.5%	15
Urban	23.3%	28
Rural	25.4%	33
"People I know chose the same option"		
White	26.7%	36
Non-white	13.6%	15
Above 200% FPL	15.8%	16
Below 200% FPL	24.2%	36
Northern California	26.0%	46
Southern California	8.2%	6
Urban	11.7%	14
Rural	29.2%	38
Total	100%	250

Note: N values for each subgroup are only listed once but apply for all options. Percentages do not sum to 100% because respondents were allowed to select three response options. One respondent did not answer this question.

# **APPENDIX E: SURVEY OPEN-ENDED COMMENTS**

MISCELLANEOUS: Is there anything else you would like to share?	N
Along with Head Start, another home visitation program my district offered truly	1
set the foundation for his early learning skills since he started that program at age 2	
Childcare is costs and it's availability are hard to come by. The profession needs	1
more support and resources.	
Early Head Start needs to be promoted more	1
Even though we don't qualify on paper, because we have to pay full price for	1
housing, medical, food, childcare and many other things that low income families	
qualify for assistance, we are struggling financially each month.	
For our family it was important for our kids to build a connection with grandma	1
and for us to teach through play and activities at home. Which is why we did not	
consider early head start. We read out loud and a daily basis and visit the library at	
least twice a week.	
Head Start could definitely use additional advocacy for its program	1
Head Start programs should increase the percentage of high income families served.	1
Head start is a great program and I'm glad it's available to many families. But	1
early childhood education programs in general is limited m, especially for middle	
income families. My family makes more than \$100k but we definitely do not have	
the means to pay \$2k in childcare which is what my local head start had said	
would be the fee and either way said they take lower income families first. Which	
is fine, I just wish there would be better options in general for kids to attend.	
Head start is a great program, but high quality childcare and preschool should be available to every family who wants it in California, for free.	1
Headstart services should not be based on financial need. Preschool programs are	1
very expensive and may prevent many to not place their chil in any program due to	
the cost.	
I appreciate that the program is available	1
I believe we need more quality child care & assist families financially.	1
I have older children and Head Start program was the best then and even better	1
now.	
I hope to have more opportunities to choose pre-school education institutions.	1
I think the Head Start program should be universal for all children.	1
I wish head start and childcare could be more economically feasible for middle	1
class families	
I wish more middle-income families who are also struggling to make ends meet	1
can have options for affordable and quality child care and for those centers	
especially home based ones are closely assessed for child safety.	
I would have a perfect plan for my kids if I was in Head Start	1
I've always have done my children's ECE and we just worked around my and my	1
husband's schedule. We only trusted family.	

Instead of throwing more dollars at this proven failure, the government should consider throwing it's weight behind proven successes. A federal program that pays private-school tuition for families.	1
Las guarderías o centros de educación temprana son la mejor opción que tenerlos	1
en casa ya que ellos se desenvuelven socialmente y también en el ámbito educativo	
Me gusta que el programa de temprana edad es cada día más mejorado	1
Mi niño asistio a un head start y me gusto mucho el programa que ofrecen, la participación de los padres	1
More resources in child care under the age of $4 \frac{1}{2}$	1
My child attended a district based child development center. There was little	1
turnover and staff were amazing. The culture was child and family centered; the	1
center has been in operation for decades (with the admin, director and many staff	
there almost just as long). Then the business model started changing during the	
pandemic (2020) to maintain/increase the profit margin sadly, this resulted in	
practices that were less family-centered, such as decreased operating hours that	
may not work for working families and more significant cost increases. It would	
be wonderful if such programs were subsidized to continue to allow space for	
child/family/centered practice rather than financially-driven practice.	
Preschool education plays an important role in children's early education, and	1
children like it very much. As a parent of a child, I think such preschool education	1
can better cultivate children's interest in learning and facilitate my working time. I	
believe they are professional	
There are not many early childhood options available in my area.	1
When our youngest was Head Start age, we would have financially qualified but	1
the hours of operation didn't meet our needs.	1
have easier access to having in home care for children as working parents have a	1
hard time enrolling into services	1
i wish the survey has Chinese translation	1
Agradezco. Su atención gracias	1
Gracias	1
N/A	13
No	4
No thank you	1
None	10
Not have	1
Not sure	11
Thanks!	1
TOTAL:	73

## **APPENDIX F: CALCULATING HOUSEHOLD POVERTY STATUS**

Poverty status of survey respondents was determined using the 2023 Federal Poverty Guidelines published by the Department of Health and Human Services at the beginning of the calendar year. "Poverty" was a dummy variable in the survey analysis, where respondents below 200% FPL were assigned a value of one (1), and respondents above 200% FPL were assigned a value of zero (0). All respondents provided information about their household size and annual household income, so all were assigned a "poverty" value of either 1 or 0.

Household/									
Family Size	25%	50%	75%	100%	150%	175%	180%	185%	200%
1	\$3,645	\$7,290	\$10,935	\$14,580	\$21,870	\$25,515	\$26,244	\$26,973	\$29,160
2	\$4,930	\$9,860	\$14,790	\$19,720	\$29,580	\$34,510	\$35,496	\$36,482	\$39,440
3	\$6,215	\$12,430	\$18,645	\$24,860	\$37,290	\$43,505	\$44,748	\$45,991	\$49,720
4	\$7,500	\$15,000	\$22,500	\$30,000	\$45,000	\$52,500	\$54,000	\$55,500	\$60,000
5	\$8,785	\$17,570	\$26,355	\$35,140	\$52,710	\$61,495	\$63,252	\$65,009	\$70,280
6	\$10,070	\$20,140	\$30,210	\$40,280	\$60,420	\$70,490	\$72,504	\$74,518	\$80,560
7	\$11,355	\$22,710	\$34,065	\$45,420	\$68,130	\$79,485	\$81,756	\$84,027	\$90,840
8	\$12,640	\$25,280	\$37,920	\$50,560	\$75,840	\$88,480	\$91,008	\$93,536	\$101,120
9	\$13,925	\$27,850	\$41,775	\$55,700	\$83,550	\$97,475	\$100,260	\$103,045	\$111,400
10	\$15,210	\$30,420	\$45,630	\$60,840	\$91,260	\$106,470	\$109,512	\$112,554	\$121,680
11	\$16,495	\$32,990	\$49,485	\$65,980	\$98,970	\$115,465	\$118,764	\$122,063	\$131,960
12	\$17,780	\$35,560	\$53,340	\$71,120	\$106,680	\$124,460	\$128,016	\$131,572	\$142,240
13	\$19,065	\$38,130	\$57,195	\$76,260	\$114,390	\$133,455	\$137,268	\$141,081	\$152,520
14	\$20,350	\$40,700	\$61,050	\$81,400	\$122,100	\$142,450	\$146,520	\$150,590	\$162,800

2023 Poverty Guidelines: 48 Contiguous States (all states except Alaska and Hawaii)

Source: United States Department of Health and Human Services, 2023.

Survey respondents reported their household incomes as a range, so poverty status calculations were approximate and rounded to the nearest product of 10,000. For example, a household of 6 people would be classified as above 200% FPL if their reported income was between \$80,001-\$90,000/year, even though an income of up to \$80,560 would still be under the 200% FPL threshold. Meanwhile, a household of 2 people would be classified as below 200% FPL if their reported income was between \$30,001-\$40,000, even though an income between \$39,440-\$40,000 would technically be above the 200% FPL threshold.

Fortunately, the 200% FPL thresholds for 2023 tend to hover around products of 10,000 as the above table demonstrates, so the margin of error resulting from poverty status calculations is smaller than it would otherwise be if the threshold of interest were instead 100% FPL. We suspect it is more likely that a respondent could have under or overreported annual income.

# APPENDIX G: CHI-SQUARE TESTS OF SURVEY INDICATORS

Geographic Area				
Race/Ethnicity	Rural	Urban	Total	
Non-white	35	76	111	
	58.7	52.3		
White	95	40	135	
	71.3	63.7		
Total	130	116	246	

Table G1: Chi-square Test of Independence for Race/Ethnicity and Geographic Area

Note: Italicized figures depict expected value.

### Table G2: Chi-square Test of Independence for Race/Ethnicity and Poverty Status

Poverty Status				
Race/Ethnicity	Above 200% FPL	Below 200% FPL	Total	
Non-white	48	63	111	
	44.7	66.3		
White	51	84	135	
	54.3	80.7		
Total	99	147	246	

Pearson chi statistic = 0.7566 p = 0.384Note: Italicized figures depict expected value.

Table G3: Chi-square	Test of Independence	for Race/Ethnicity and	State Region
	100001110000000000000000000000000000000		

State Region				
Northern	Southern California	Total		
California				
63	48	111		
79.9	31.1			
114	21	135		
97.1	37.9			
177	69	246		
	Northern California 63 79.9 114 97.1	Northern CaliforniaSouthern California634879.931.11142197.137.9		

p = 0.000

Pearson chi statistic = 23.1389

Note: Italicized figures depict expected value.

Poverty Status				
Geographic Area	Above 200% FPL	Below 200% FPL	Total	
Rural	43	88	131	
	52.7	78.3		
Urban	58	62	120	
	48.3	71.7		
Total	101	150	251	

# Table G4: Chi-square Test of Independence for Geographic Area and Poverty Status

Pearson chi statistic = 6.2643

Note: Italicized figures depict expected value.

# Table G5: Chi-square Test of Independence for Geographic Area and State Region

p = 0.384

State Region				
Geographic Area	Northern California	Southern California	Total	
Rural	122	9	131	
	92.9	38.1		
Urban	56	64	120	
	85.1	34.9		
Total	178	73	251	

Pearson chi statistic = 65.5541p = 0.000Note: Italicized figures depict expected value.

Table G6: Chi-square	Test of Independent	dence for Poverty	Status and State Region
			~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~

State Region				
Northern	Southern California	Total		
California				
75	26	101		
71.6	29.4			
103	47	150		
106.4	43.6			
178	73	251		
-	Northern California 75 71.6 103 106.4	Northern         Southern California           California		

p = 0.339

Pearson chi statistic = 0.9147

Note: Italicized figures depict expected value.

# **APPENDIX H: EXAMPLES OF SURVEY BOT RESPONSES**

To help your children stay healthy and. Security, and highlights why these procedures are important. To have a modern view of children Should reflect the people-oriented professional thought To provide a good development environment for children.

I should carry out preschool education with the idea of cultivating gifted children

The first to make a decision is to understand the background strength and reputation of the school.

Social competition

I want him to win from the starting line

A good education influenced him all his life

It's up to us to discover the child's talent

Preschool education can better enable children to adapt to campus learning life as soon as possible, in line with campus learning life, and in the early stage can be integrated into learning as soon as possible, to avoid children hesitate to adapt to learning or the first contact with learning and not ideal results

Preschool children's enlightenment education to develop children's thinking has a lot of help

Implement the principle of combining conservation with education, and create a safe, clean and harmonious educational environment. Only in this way can children develop properly and coordinate their functions.

I think children's preschool education enlightenment for children's brain development is very necessary I read before how they can develope skills with an early education that can help them to stimulate their minds, prepare them for the primary school. It helps them to function in their environment, to be more sociable and more confident, so I decide that I wanted that for my children, I wanted something that would allow them to develop their minds, their abilities and to discover something different from an early age and somebody recommended me a good place.

I listen to the friends around me recommend and suggest the importance of enlightenment education, and I have more time to do my own thing

I hope my children can better receive early education

Kill time

Give the child opportunity to think, now there are a lot of parents sometimes will rush in children's early education.

First, the price is reasonable

Families don't have much time to take care of their children in the early years so that they can receive education

Early education institutions can enhance the parenting experience

Early education can improve the starting point of baby's learning

Early childhood enlightenment education can better develop children's brains

Developing a child's brain, developing habits, and early education are important for a child's whole life Children who have attended early childhood education will learn to share, be humble, polite and civilized in a loving and joyful environment, thus shaping their good character, behavior and habits

I should carry out preschool education with the idea of cultivating gifted children

Early childhood education develops the brain so that children can get ahead of the starting line

Children in daily life should also do more outdoor sports, more outdoor games, which can promote physical coordination, can effectively promote physical growth and development, can also develop brain development, the child's body, mind and body is a great benefit.

Always stay one step ahead of your baby and guide him to his full development

To get an early start

Better let children know their dreams

After the child goes to early childhood education, it will certainly make the child become better and better, and will also make the child have a better behavior, to prepare for elementary school

# **APPENDIX I: SURVEY INSTRUMENT (ENGLISH)**

Welcome to the USC Study on Early Childhood Education Enrollment in California. The purpose of this study is to gain understanding of how parents in California select early childhood education programs for their children. Data collected from this study will inform marketing and awareness campaigns at Head Start California, a nonprofit organization that serves Head Start programs. We hope to learn more about your awareness of early childhood education programs, and which factors contributed to your decision for your child(ren).

This survey is expected to take 5-10 minutes and is designed for parents living in California who have at least one child aged 10 or younger. Please answer all questions to the best of your ability. Please note that this study is anonymous, and will not impact your child's school enrollment in any way.

All survey questions are anonymous and do not ask for personal identifiable information. Survey responses will be stored securely in USC OneDrive. If you have any questions about this study, please contact Liz Stanfield, USC lead researcher, at estanfie@usc.edu.

## **Screening Questions**

Do you currently reside in California?

- Yes
- No  $\square$  end of survey

Are you a parent or guardian of a child aged 10 or younger?

- Yes
- No  $\square$  end of survey

# **Decision-making Factors**

What childcare option are you using (or did you use) for your youngest child? Please select all that apply.

- School-based program (such as Transitional Kindergarten / preschool on an elementary school site)
- Head Start or Early Head Start
- Childcare center or preschool
- Family childcare home
- In-home care by parents, family members or friends
- Other: \_\_\_\_\_

Which three factors most heavily influenced your early education and/or childcare decision? Please select up to three.

- Cost
- This option is located close to me
- This option worked well with my schedule
- Quality of the care and/or education provided
- Recommended by someone I trust
- People I know chose the same option

- I chose the same option for another child
- This option allows my child to better understand his/her culture
- I don't know
- Other: \_\_\_\_\_

Please explain how you made this decision for your child's early care and education:

#### **Program Awareness**

Have you heard of "Head Start" before?

- Yes
- No (go to demographics)
- I'm not sure

How familiar are you with the "Head Start" program? Please select the option that most closely matches your level of familiarity and understanding.

- 1 I've heard of Head Start, but I don't know what they do
- 2 I've heard of Head Start, and I know a little bit about the program
- 3 I am familiar with Head Start, and I understand what the program does
- 4 I am very familiar with Head Start, and I know exactly what the program does

*[conditional on indicating "3" or "4"]:* Have you, your family, or a someone you know been involved with Head Start?

- Yes someone I know attended Head Start as a student
- Yes someone I know was employed by Head Start
- No, no one I know attended or was employed by Head Start

How did you learn about Head Start? Please select all that apply.

- Google or other internet search
- Friends and family
- Flyers/newspaper ads
- Social network sites (Facebook, Instagram, LinkedIn)
- Received email or e-newsletter
- Through an organization near where I live
- Through the local childcare resource and referral agency
- Through my local school district
- There is a Head Start location near me
- I attended Head Start as a child or someone I know attended Head Start as a child
- I don't know / I can't remember
- Other: \_\_\_\_\_

#### **Demographic Information**

What is your gender?

- Female
- Male
- Other:

What is your age?

- Under 18
- 18-24 years old
- 25-34 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65+ years old

How many people live at your address?

- 2 people
- 3 people
- 4 people
- 5 people
- 6 people
- 7 people
- 8+ people

What is your household's annual income before taxes, to the best of your knowledge?

- \$0 \$10,000
- \$10,001 \$20,000
- \$20,001 \$30,000
- \$30,001 \$40,000
- \$40,001 \$50,000
- \$50,001 \$60,000
- \$60,001 \$70,000
- \$70,001 \$80,000
- \$80,001 \$90,000
- \$91,001 \$100,000
- More than \$100,000/year

Does your family receive any of the following public benefits? Please select all that apply.

- CalWORKS
- SNAP (food stamps)
- Supplemental Security Income (SSI)
- WIC (Women, Infants and Children)
- Section 8 (housing vouchers)
- MediCal / MediCaid
- None of the above
- I don't know
- Prefer not to answer
- Other:

Which county do reside in?

• [dropdown of counties in California]

What is your race? Please select all that apply.

- Asian American / Pacific Islander
- Black / African American
- White / Caucasian
- American Indian / Alaskan Native
- Hispanic / Latino
- Multiracial
- I don't know
- Prefer not to answer
- Other: \_\_\_\_\_

Which languages do you speak at home? Select all that apply.

- English
- Spanish
- Chinese
- Vietnamese
- Tagalog / Filipino
- Korean
- Russian
- Other: \_\_\_\_\_

### **Miscellaneous**

Is there anything else you would like to share?

## Survey Raffle

By completing this survey, you are eligible for a \$100 VISA gift card raffle. If you are interested in entering the raffle, please click the <u>link</u>.

## Raffle Contact Info [new link]

By completing this survey, you are eligible for a \$100 VISA gift card raffle. If you are interested in entering the raffle, please provide an email or phone number below. If you are selected to win a gift card, you will be notified via the contact information provided below.

# **APPENDIX J: SURVEY INSTRUMENT (SPANISH)**

**Bienvenido al Estudio de la USC sobre la Inscripción en la Educación de la Primera Infancia en California.** El propósito de este estudio es comprender cómo los padres en California seleccionan los programas de educación de la primera infancia para sus hijos. Los datos recopilados de este estudio informarán las campañas de marketing y concientización en Head Start California, una organización sin fines de lucro que brinda servicios a los programas de Head Start. Esperamos aprender más sobre su conocimiento de los programas de educación de la primera infancia y qué factores contribuyeron a su decisión para su(s) hijo(s).

Se espera que esta encuesta tome de 5 a 10 minutos y está diseñada para padres que viven en California y tienen al menos un hijo de 10 años o menos. Esta encuesta no solicita ninguna información de identificación personal. Responda todas las preguntas lo mejor que pueda. **Tenga en cuenta que este estudio es anónimo y no afectará la inscripción escolar de su hijo de ninguna manera.** 

Las respuestas de la encuesta se almacenarán de forma segura en USC OneDrive. Las personas que completan la encuesta son elegibles para participar en una rifa para tener la oportunidad de ganar una tarjeta de regalo VISA de \$100. Para participar en la rifa, haga clic en el enlace externo proporcionado al final de la encuesta, que le pedirá información de contacto. Cualquier información de contacto proporcionada para la rifa no se podrá rastrear hasta su respuesta anónima a la encuesta. Los ganadores de la rifa serán notificados a más tardar en mayo de 2023.

Si tiene alguna pregunta sobre este estudio, comuníquese con Liz Stanfield, investigador principal de la USC, en estanfie@usc.edu.

# Preguntas de detección

- ¿Resides en California?
  - Sí
  - No  $\Box$  fin de la encuesta

¿Es usted padre o tutor de un niño de 10 años o menos?

- Sí
- No  $\Box$  fin de la encuesta

# Factores de toma de decisiones

¿Qué opción de cuidado de niños está utilizando (o utilizó) para su hijo menor? Por favor seleccione todas las respuestas válidas.

- Programa basado en la escuela (como jardín de infantes de transición/preescolar en un sitio de escuela primaria)
- Head Start o Early Head Start
- Guardería o preescolar
- hogar de cuidado de niños en familia
- Atención domiciliaria por parte de los padres, familiares o amigos
- Otro: \_\_\_\_\_

¿Cuáles son los tres factores que más influyeron en su decisión sobre la educación temprana y/o el cuidado de los niños? Seleccione hasta tres.

- Costo
- Esta opción se encuentra cerca de mí.
- Esta opción funcionó bien con mi horario.
- Calidad de la atención y/o educación brindada
- Recomendado por alguien en quien confío
- Personas que conozco eligieron la misma opción
- Elegí la misma opción para otro niño.
- Esta opción le permite a mi hijo comprender mejor su cultura
- No sé
- Otro: \_\_\_\_\_

Explique cómo tomó esta decisión para el cuidado y la educación temprana de su hijo:

## Conciencia del programa

¿Ha oído hablar de "Head Start" antes?

- Sí
- No (ir a datos demográficos)
- no estoy seguro

¿Qué tan familiarizado está con el programa "Head Start?" Seleccione la opción que más se acerque a su nivel de familiaridad y comprensión.

- 1 He oído hablar de Head Start, pero no sé a qué se dedican
- 2 He oído hablar de Head Start y sé un poco sobre el programa
- 3 Estoy familiarizado con Head Start y entiendo lo que hace el programa
- 4 Estoy muy familiarizado con Head Start y sé exactamente lo que hace el programa

¿Cómo se enteró de Head Start? Por favor seleccione todas las respuestas válidas.

- Google u otra búsqueda en Internet
- Amigos y familia
- Folletos/anuncios en periódicos
- Sitios de redes sociales (Facebook, Instagram, LinkedIn)
- Correo electrónico o boletín electrónico recibido
- A través de una organización cerca de donde vivo
- A través de la agencia local de recursos y referencias para el cuidado de niños
- A través de mi distrito escolar local
- Hay una ubicación de Head Start cerca de mí
- Asistí a Head Start cuando era niño o alguien que conozco asistió a Head Start cuando era niño
- no sé / no recuerdo
- Otro: \_\_\_\_\_\_

¿Usted, su familia o alguien que conoce ha estado involucrado con Head Start?

• Sí, alguien que conozco asistió a Head Start como estudiante

- Sí, alguien que conozco fue empleado de Head Start
- No, nadie que yo conozca asistió o fue empleado por Head Start

## Información demográfica

¿Cuál es su género?

- Femenino
- Masculino
- No binario/a / tercer género
- Prefiero no decirlo
- Otro: \_\_\_\_\_

¿Cuál es tu edad?

- Menores de 18 años
- 18-24 años
- 25-34 años
- 25-34 años
- 35-44 años
- 45-54 años
- 55-64 años
- 65+ años

¿Cuántas personas viven en su dirección?

- 2 personas
- 3 personas
- 4 personas
- 5 personas
- 6 personas
- 7 personas
- 8+ personas

¿Cuál es el ingreso anual de su hogar antes de impuestos, según su leal saber y entender?

- \$0 \$10,000/año
- \$10,001 \$20,000/año
- \$20,001 \$30,000/año
- \$30,001 \$40,000/año
- \$40,001 \$50,000/año
- \$50,001 \$60,000/año
- \$60,001 \$70,000/año
- \$70,001 \$80,000/año
- \$80,001 \$90,000/año
- \$91,001 \$100,000/año
- Más de \$100,000/año

¿Recibe su familia alguno de los siguientes beneficios públicos? Por favor seleccione todas las respuestas válidas.

CalWORKS

- SNAP (cupones de alimentos)
- Seguridad de Ingreso Suplementario (SSI)
- WIC (mujeres, bebés y niños)
- Sección 8 (bonos de vivienda)
- MediCal / MediCaid
- Ninguna de las anteriores
- No sé
- Prefiero no responder
- Otro: \_\_\_\_\_

¿En qué condado residen?

• [desplegable de condados en California]

¿Cuál es su raza? Por favor seleccione todas las respuestas válidas.

- Asiático americano / Isleño del Pacífico
- Negro / Afroamericano
- Blanco / Caucásico
- Indio americano/nativo de Alaska
- Hispano / latino
- Multirracial
- No sé
- Prefiero no responder
- Otro: \_\_\_\_\_

¿Qué idiomas hablas en casa? Seleccione todas las que correspondan.

- Inglés
- Español
- Chino
- Vietnamita
- Tagalo / filipino
- Coreano
- Ruso
- Otro: \_\_\_\_\_

<u>Misceláneas</u>

¿Hay algo más que le gustaría compartir?

### Rifa de Encuesta

Al completar esta encuesta, usted es elegible para una rifa de una tarjeta de regalo VISA de \$100. Si está interesado en participar en el sorteo, proporcione un correo electrónico o un número de teléfono a continuación. Si es seleccionado para ganar una tarjeta de regalo, se le notificará a través de la información de contacto que se proporciona a continuación.

# **APPENDIX K: SURVEY INSTRUMENT (RUSSIAN)**

Добро пожаловать на сайт проекта исследования Университета Южной Калифорнии (University of Southern California или USC в аббревиатуре) по охвату дошкольным образованием в штате Калифорния. Цель данного исследования — понять, как родители в Калифорнии выбирают программы дошкольного образования для своих детей. Данные, собранные в ходе этого исследования, будут использованы в разработке информационной и маркетинговой кампаний некоммерческой организации Head Start California, которая обслуживает программы дошкольного образования Head Start. Мы надеемся узнать больше о Вашей осведомленности о программах дошкольного образования и о том, какие именно факторы повлияли на Ваш выбор программы.

Данный опрос предназначен для родителей, проживающих в Калифорнии, у которых есть хотя бы один ребенок в возрасте 10 лет или младше. Заполнение опроса займет 5-10 минут. Пожалуйста, ответьте на все вопросы в меру своих возможностей. Обращаем Ваше внимание, что опрос анонимный и никак не повлияет на зачисление Вашего ребенка в школу.

Все вопросы данного опроса являются анонимными и не запрашивают личную информацию. Все ответы будут надежно храниться в облачном хранилище OneDrive, принадлежащем университету USC. Если у вас есть какие-либо вопросы об исследовании, пожалуйста, свяжитесь с Лиз Стэнфилд, ведущим исследователем USC, по электронному адресу estanfie@usc.edu.

## Отборочные вопросы

Проживаете ли Вы в настоящее время в Калифорнии?

- Да
- Нет 🗆 конец опроса

Являетесь ли родителем или опекуном ребенка в возрасте 10 лет или младше?

- Да
- Нет 🗆 конец опроса

## Факторы, повлиявшие на Ваш выбор

Какой вариант дошкольного учреждения и/или программы ухода за детьми Вы выбираете или выбрали для Вашего младшего ребенка? Пожалуйста, выберите все подходящие варианты.

• Подготовительная программа при школе (программа Transitional Kindergarten / дошкольное учреждение на территории начальной школы)

- Программы Head Start или Early Head Start
- Детский сад (childcare center / preschool)
- Детский сад домашнего типа (family childcare home)
- Уход на дому родителями, членами семьи или друзьями
- Другое: \_\_\_\_\_

Выберите три фактора, которые в значительной мере повлияли на Ваш выбор дошкольного учреждения и/или программы ухода за детьми. Пожалуйста, выберите не более трех вариантов ответа.

- Стоимость
- Близкое местоположение
- Этот вариант подходит под мой график
- Качество предоставляемого ухода и/или образовательной программы
- Этот вариант мне рекомендовал знакомый, которому я доверяю
- Мои знакомые тоже выбрали этот вариант
- Я уже выбирал этот вариант для другого ребенка
- Этот вариант позволяет моему ребенку лучше понять свою культуру
- Я не знаю
- Другое: \_\_\_\_\_

Пожалуйста, объясните, как Вы принимали решение, то есть как выбирали дошкольное учреждение и/или программу ухода за детьми.

#### Осведомленность о программе

Слышали ли Вы раньше о программе Head Start?

- Да
- Нет перейти к вопросу "Демографические данные"
- Не уверен(а)

Насколько хорошо Вы осведомлены о программе Head Start? Пожалуйста, выберите вариант, который наиболее точно отражает степень Вашей осведомленности о программе.

- 1 Я слышал(а) о Head Start, но не знаю, чем они занимаются
- 2 Я слышал(а) о Head Start и немного знаю о программе
- 3 Я знаком(а) с программой Head Start и понимаю, чем они занимаются
- 4 Я хорошо знаком(а) с программой Head Start и точно знаю, какие услуги они предлагают

Как Вы узнали о программе Head Start? Пожалуйста, выберите все подходящие варианты.

- Google или другой интернет-поисковик
- Друзья или члены семьи

- Листовки или объявления в газетах
- Социальные сети (Facebook, Instagram, LinkedIn)
- Электронное письмо или рассылка
- Через организацию, расположенную рядом с нашим домом
- Через местное справочное агентство или ресурс по вопросам ухода за детьми
- Через местный школьный округ (school district)
- Рядом с нашим домом расположено учреждение Head Start
- Я посещал программу Head Start в детстве или знакомый(ая) посещал(а) программу Head Start в детстве
- Не знаю / не помню
- Другое: \_\_\_\_\_

Вы, члены Вашей семьи или кто-то из Ваших знакомых когда-нибудь участвовали в программах Head Start?

- Да я знаю кое-кого, кто посещал Head Start в качестве студента
- Да я знаю кое-кого, кто работал в Head Start
- Нет, у меня нет знакомых, которые посещали или работали в Head Start

### Демографические данные

Укажите Ваш пол:

- Женский
- Мужской
- Другой: \_\_\_\_\_\_

Укажите Ваш возраст:

- До 18
- 18-24
- 25-34
- 25-34
- 35-44
- 45-54
- 55-64
- Старше 65

Сколько человек проживает по Вашему адресу?

- 2 человека
- 3 человека
- 4 человека
- 5 человек
- 6 человек
- 7 человек
- Больше 8 человек

Каков годовой доход Вашей семьи до уплаты налогов? Укажите в той степени, в которой это Вам известно.

- \$0 \$10,000
- \$10,001 \$20,000
- \$20,001 \$30,000
- \$30,001 \$40,000
- \$40,001 \$50,000
- \$50,001 \$60,000
- \$60,001 \$70,000
- \$70,001 \$80,000
- \$80,001 \$90,000
- \$91,001 \$100,000
- Более \$100,000

Получает ли Ваша семья какие-либо из следующих социальных пособий? Пожалуйста, выберите все подходящие варианты.

- CalWORKS (Программа помощи малоимущим семьям)
- SNAP (Продовольственные талоны)
- SSI Supplemental Security Income (Дополнительный социальный доход)
- WIC Women, Infants and Children (Женщины, младенцы и дети)
- Section 8 Housing vouchers (Раздел 8 Ваучерная программе по аренде жилья)
- MediCal / Medicaid (Программы медицинского страхования)
- Ни один из вышеперечисленных
- Я не знаю
- Предпочитаю не отвечать
- Другое: \_\_\_\_\_\_

В каком округе Калифорнии Вы проживаете?

• [dropdown of counties in California]

Укажите Вашу расовую/этническую принадлежность. Пожалуйста, выберите все подходящие варианты.

- Американец азиатского происхождения / уроженец островов Тихого океана
- Чернокожий / афроамериканец
- Белый
- Американский индеец / коренной житель Аляски
- Испаноговорящий / латиноамериканец
- Многорасовый
- Я не знаю
- Предпочитаю не отвечать
- Другое: \_\_\_\_\_

На каких языках Вы говорите дома? Пожалуйста, выберите все подходящие варианты.

- Английский
- Испанский
- Китайский

- Вьетнамский
- Тагальский / Филиппинский
- Корейский
- Русский
- Другой: \_\_\_\_\_\_

## Прочее

Есть ли что-нибудь еще, чем Вы хотели бы поделиться?

#### <u>Розыгрыш</u>

Поскольку Вы заполнили данный опрос, Вы имеете право участвовать в розыгрыше подарочной карты VISA стоимостью 100 долларов. Если Вы хотите принять участие в розыгрыше, пожалуйста, укажите адрес электронной почты или номер телефона ниже. В случае выигрыша, Вы получите уведомление через контактную информацию, указанную ниже.

#### Новое:

Заполнив данный опрос, Вы имеете право участвовать в розыгрыше подарочной карты VISA стоимостью 100 долларов. Чтобы принять участие в розыгрыше, пожалуйста, пройдите по внешней ссылке в конце опроса и укажите контактную информацию. Предоставленная контактная информация никак не будет привязана к Вашим ответам. Получение подарочной карты не гарантируется всем участникам розыгрыша, но все участники имеют равные шансы на выигрыш. Победители розыгрыша будут уведомлены не позднее мая 2023 года.

#### **APPENDIX L: SURVEY INSTRUMENT (KOREAN)**

USC의 캘리포니아 초기 아동기 교과 교육 연구에 오신 것을 환영합니다. 이 연구의 목적은 캘리포니아의 부모가 어떻게 자녀들의 초기 아동기 교육 프로그램을 선택하는지에 대해 이해하는 것입니다. 이 연구에서 수집된 데이터는 Head Start 프로그램을 제공하는 비영리 조직인 Head Start California의 마케팅 및 인식 캠페인에 정보를 제공할 것입니다. 우리는 유아 교육 프로그램에 대한 귀하의 인식과 귀하의 자녀(들)에 대한 귀하의 결정에 기여한 요인에 대해 더 자세히 알아보기를 희망합니다.

이 설문조사는 5~10분 정도 소요될 것으로 예상되며 10세 이하 자녀가 한 명 이상 있는 캘리포니아에 거주하는 부모를 위해 만들어졌습니다. 모든 질문에 최선을 다해 답변해 주실 것을 부탁드립니다. 이 연구는 익명으로 진행되며 자녀의 학교 등록에 어떤 식으로도 영향을 미치지 않을 것입니다.

모든 설문 조사 질문은 익명이며 개인 식별 정보를 요구하지 않습니다. 설문 응답은 USC OneDrive에 안전하게 저장됩니다. 이 연구에 대해 질문이 있는 경우 USC 수석 연구원인 Liz Stanfield (<u>estanfie@usc.edu</u>) 에게 문의 바랍니다.

선별 질문

현재 캘리포니아에 거주하고 계십니까?

- 예
  - 아니오 🗆 설문조사 종료

귀하는 10세 이하 아동의 부모 또는 보호자입니까?

- 예
- 아니오 □ 설문조사 종료

#### <u>의사 결정 요인</u>

가장 어린 자녀를 위해 어떤 보육 방법을 사용하고 있습니까(또는 사용했습니까)? 해당하는 것을 모두 선택해 주십시오.

- 학교 기반 프로그램(예: Transitional Kindergarten/초등학교 부지의 유치원)
- Head Start 또는 Early Head Start
- Childcare center 또는 preschool
- Family childcare home
- 부모, 가족 또는 친구에 의한 재택 케어
- 기타:

귀하의 조기 교육 및/또는 보육 결정에 가장 큰 영향을 미친 세 가지 요소는 무엇입니까? 최대 3개까지 선택해주세요.

- 비용
- 위치 (나와 가까운 곳에 위치)
- 나의 일정에 적합한 옵션
- 제공되는 케어나 교육의 질
- 내가 신뢰하는 사람에 의한 추천
- 내가 아는 사람들이 선택한 옵션
- 다른 자녀에게 선택했던 것과 동일한 옵션
- 자녀가 자신의 문화를 더 잘 이해할 수 있는 옵션
- 모르겠음
- 기타: \_\_\_\_\_

자녀의 조기 케어 및 교육을 위해 어떻게 이러한 결정을 내렸는지 설명해 주십시오:

#### <u>프로그램 인식</u>

이전에 "Head Start"에 대해 들어 보셨습니까?

- 예
- 아니오 (아래 인구 통계 정보 항목으로 가세요)
- 잘 모르겠음

"Head Start" 프로그램에 대해 얼마나 잘 알고 계십니까? 귀하의 친숙도 및 이해도 수준과 가장 일치하는 옵션을 선택하십시오.

- 1-Head Start에 대해 들어봤지만 잘 모르겠습니다.
- 2-Head Start에 대해 들어본 적이 있으며 프로그램에 대해 조금 알고 있습니다.
- 3-나는 Head Start에 익숙하며 프로그램이 무엇을 하는지 이해합니다.
- 4-나는 Head Start에 매우 익숙하며 프로그램이 무엇을 하는지 정확히 알고 있습니다.

[위 질문에서 "3" 또는 "4"를 선택한 경우]: 귀하, 귀하의 가족 또는 지인이 Head Start와 관련이 있습니까?

- 네 내가 아는 사람이 학생으로 Head Start에 다녔습니다.
- 네 내가 아는 사람이 Head Start에 고용되었습니다.
- 아니오 내가 아는 아무도 Head Start에 참석했거나 고용된 적이 없습니다.

"Head Start"에 대해 어떻게 알게 되었습니까? 해당하는 것을 모두 선택해 주십시오.

- Google 또는 기타 인터넷 검색
- 친구및가족
- 전단지/신문 광고
- 소셜 네트워크 사이트(Facebook, Instagram, LinkedIn)
- 이메일 또는 e-뉴스레터 수신
- 내가 사는 곳에서 가까운 기관을 통해
- 지역 childcare resource나 소개 기관을 통해
- 내지역 학군(school district)을 통해
- 내 근처에 Head Start 위치가 있습니다.
- 어렸을 때 Head Start에 다녔거나, 지인이 어릴 때 Head Start에 다녔습니다.
- 모르겠음/기억이 나지 않음
- 기타:

#### 인구 통계 정보

성별은 무엇입니까?

- 여성
- 남성
- 기타:

귀하의 나이는 무엇입니까?

- 18세 미만
- 18-24 세
- 25-34 세
- 25-34 세
- 35-44 세
- 45-54 세
- 55-64 세
- 65세 이상

가족은 몇 명 입니까?

- 2 명
- 3명
- 4명

- 5명
- 6명
- 7 명
- 8명이상

귀하가 아는 한 가구의 세금 공제 전 연간 소득은 얼마입니까?

- \$0 \$10,000
- \$10,001 \$20,000
- \$20,001 \$30,000
- \$30,001 \$40,000
- \$40,001 \$50,000
- \$50,001 \$60,000
- \$60,001 \$70,000
- \$70,001 \$80,000
- \$80,001 \$90,000
- \$91,001 \$100,000
- 연간 \$100,000 이상

귀하의 가족은 다음과 같은 공공 혜택을 받고 있습니까? 해당하는 것을 모두 선택해 주십시오.

- CalWORKS
- SNAP (food stamps)
- Supplemental Security Income (SSI)
- WIC (Women, Infants and Children)
- Section 8 (housing vouchers)
- MediCal / MediCaid
- 해당사항 없음
- 잘 모름
- 응답하고 싶지 않음
- 기타: \_\_\_\_\_\_

어느 카운티에 거주하고 있습니까?

• [dropdown of counties in California]

귀하의 인종은 무엇입니까? 해당하는 것을 모두 선택해 주십시오.

- 아시아계 미국인/태평양 섬 주민
- 흑인/아프리카계 미국인
- 백인/코카서스인
- 아메리칸 인디언/알래스카 원주민
- 히스패닉/라틴계
- 다인종
- 모름
- 응답하기를 원하지 않음
- 기타: \_\_\_\_\_

집에서 어떤 언어를 사용합니까? 해당되는 모든 것들을 고르세요.

- English
- Spanish
- Chinese
- Vietnamese
- Tagalog / Filipino
- Korean
- Russian

• Other: \_\_\_\_\_

#### **Miscellaneous**

공유하고 싶은 다른 것이 있습니까?

#### <u>설문 조사 추첨</u>

이 설문 조사를 완료하면 \$100 VISA Gift card 추첨을 받을 수 있습니다. 추첨 참여에 관심이 있으시면 <u>link</u>를 클릭 하십시오.

#### <u> 추첨 연락처 정보 [new link]</u>

이 설문 조사를 완료하면 \$100 VISA Gift card추첨을 받을 수 있습니다. 추첨 참여를 원하시는 분은 아래 이메일 또는 전화번호를 입력해주세요. 상품권 당첨자로 선정되신 경우 아래 제공된 연락처 정보를 통해 알려드립니다.

Individuals who complete the survey are eligible to enter a raffle for a chance to win a \$100 VISA gift card. To enter the raffle, please click the external link provided at the end of the survey, which will prompt you for contact information. Any contact information provided for the raffle will not be traceable to your anonymous survey response. All raffle entries have an equal chance of winning a gift card. A gift card is not guaranteed for all entries. Raffle winners will be notified no later than May 2023.

이 설문 조사를 완료하면 \$100 VISA Gift card추첨을 받을 수 있습니다. 추첨 참여를 원하시는 분은 아래 이메일 또는 전화번호를 입력해주세요. 상품권 당첨자로 선정되신 경우 아래 제공된 연락처 정보를 통해 알려드립니다.

설문 조사를 완료한 개인은 \$100 VISA 기프트 카드를 받을 수 있는 추첨에 응모할 수 있습니다. 추첨에 참여하려면 설문조사 끝에 제공된 외부 링크를 클릭하십시오. 그러면 연락처 정보를 입력하라는 메시지가 표시됩니다. 추첨을 위해 제공된 모든 귀하의 연락처 정보로 익명 설문 조사 내용을 추적할 수 없습니다. 모든 추첨자는 기프트 카드 당첨 확률이 동일합니다. 모든 추첨자에 대해 기프트 카드가 보장되는 것은 아닙니다. 추첨 당첨자는 늦어도 2023년 5월까지 통보됩니다.