2018 Regional Market Rate Survey of California Child Care Providers

Full Findings Report

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DEFINITION OF TERMS

- **85th Percentile:**

  The point at which 85% of children are enrolled in child care programs that cost less and 15% are enrolled in programs that cost more.

- **Licensed Child Care Center (LCC):**

  An LCC or Day Care Center is generally located in a commercial building. These centers provide non-medical care and supervision for infant to school-age children in group settings.

- **Licensed Family Child Care Home (LFCH):**

  An LFCH is in the home of a licensed provider. Children are given non-medical care and supervision in a home-like environment. There are two types of LFCHs: small homes with no more than eight children and large homes with no more than 14 children.

- **Market Profile:**

  Market Profiles are non-contiguous groupings of ZIP codes that are similar in terms of the socioeconomic and demographic characteristics related to child care costs.

EXECUTIVE SUMMARY

Each year, the state of California distributes billions of dollars for child care, a significant portion of which provides child care reimbursements for families in various state- and federal-subsidized child care programs administered by county welfare departments and alternative payment or voucher programs. The Market Rate Survey collects the data necessary to determine what the reimbursement ceilings should be for defined geographic areas throughout California. As required by the federal government, California conducts the Market Rate Survey every two years. As a result of a competitive bid process, the California Department of Education selected ICF to conduct the 2018 iteration of the Market Rate Survey, as well as six previous iterations beginning in 2005.

The 2018 Market Rate Survey employed the same sampling and analysis methods developed for and utilized in previous survey iterations, including:

Sampling and estimation based first on statistical socioeconomic modeling of California's ZIP codes into "Market Profiles."

Relying on the Community Care Licensing database as a source of provider information, resulting in the most inclusive listing of providers possible.

Sampling LCCs and LFCHs based on the physical location's ZIP code.

Calculating reimbursement ceilings at the Market Profile level for care setting, age of the child, and time category (hourly, daily, weekly, monthly). County and sub-county estimates become the weighted averages of the Market Profiles within their jurisdictions. This approach is based on statistical practices for small area estimation and "borrowing strength"; it allows the estimation of reimbursement ceilings for small areas that may not have a sufficient number of responding providers.

Fielding for the 2018 Market Rate Survey began in May 2018 and continued into June 2018. Using the most conservative American Association for Public Opinion Research (AAPOR) methods for calculating survey outcomes, LCCs had a 47% response rate, and LFCHs had a 39% response rate. These calculations are further explained in *Section 3. Methodology and Survey Outcomes*.

Overall, the 2018 Market Rate Survey indicates that the cost of child care for parents (i.e., the rates charged by providers) has increased for infants, pre-schoolers, and school-age children in LCCs throughout the state compared to 2016. The monthly reimbursement ceilings for LCCs are shown in Table 1-1 below.

Table 1-1: Monthly Cost Reimbursement Ceilings for LCCs (2009–2018)

Year	Infant	Pre-school	School-age
2009	$1,282.03	$900.71	$663.69
2012	$1,328.22	$936.55	$761.60
2014	$1,456.97	$1,016.90	$819.73
2016	$1,440.48	$994.23	$830.76
2018	$1,513.46	$1,089.23	$900.94

Table 1-2 below shows that the weekly cost reimbursement ceilings for LFCHs have also increased throughout the state in 2018.

Table 1-2: Weekly Cost Reimbursement Ceilings for LFCHs (2009–2018)

Year	Infant	Pre-school	School-age
2009	$195.16	$184.98	$157.38
2012	$224.53	$204.15	$167.56
2014	$222.70	$205.37	$180.50
2016	$236.18	$219.11	$183.33
2018	$256.52	$231.33	$202.69

Table 1-3 shows that the cost increased for all age groups. School-age children in LFCHs saw the biggest increase (10.6%). All of the 2016 to 2018 changes were statistically significant.

Table 1-3: Average Change in Child Care Costs by Age Group and Care Category (2016–2018)

Care Category	Infant	Pre-school	School-age
LFCH	8.6%	5.6%	10.6%
LCC	5.1%	9.6%	8.4%

Table 1-4 and Table 1-5 shows the changes in cost from 2016 to 2018 compared to those from 2014 to 2016. The 2014 to 2016 change saw some cost decreases for LCCs. This was not the case for the most recent survey, which saw cost increases for all categories relative to 2016.

Table 1-4: LCC Change in Child Care Costs, 2014–2018

Care Category	Infant	Pre-school	School-age
2014 to 2016	-1.1%	-2.2%	1.3%
2016 to 2018	5.1%	9.6%	8.4%

Table 1-5: LFCH Change in Child Care Costs, 2014–2018

Care Category	Infant	Pre-school	School-age
2014 to 2016	6.10%	6.70%	1.60%
2016 to 2018	8.6%	5.6%	10.6%

INTRODUCTION

A. BACKGROUND AND PURPOSE OF THE MARKET RATE SURVEY

For the last 30 years, legislation governing federal funding for child care at the state level has required that individual states conduct market rate surveys of child care costs to reflect the different marketplaces statewide. The Family Support Act of 1988 stipulated that child care subsidy rates must be informed by market rates to be eligible for federal funding. The Child Care and Development Block Grant Act of 1990 repeated this market orientation toward child care subsidies by requiring states to give parental choice in the marketplace.[1]

The 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) simplified and restructured funding for the various federal child care programs under a single block grant program known as the Child Care and Development Fund (CCDF).[2] The final rule on CCDF, published in July of 1998, implemented the child care provisions outlined in PRWORA and mandated that parents who receive child care subsidies have "equal access" to child care services in a given marketplace.[3] A key element for states to ensure equal access for eligible families is adequate reimbursement rates, which must be based on a local child care market rate survey conducted at least every two years.[4,5] Having equal access to the full range of child care services and providers means that payment rates established by child care programs for eligible families are based on market conditions and are comparable to rates paid by non-subsidized families.

This mandate provides some level of flexibility; states have the opportunity to design child care subsidy programs that fit local conditions and can also develop their own market rate survey methodology based on state resources and research needs. For example, states may choose which type of child care providers to survey, the method of data collection,

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[1] Weber, R. B., Grobe, D., Davis, E. E., Kreader, J. L., & Pratt, C. C. (2007, May). *Practices and policies: Market Rate Surveys in states, territories and tribes* (p. 1). Oregon State University Family Policy Program. Retrieved from http://health.oregonstate.edu/sites/default/files/sbhs/pdf/Survey-of-States-Report-FINAL-05-30.pdf

[2] Loprest, P., Schmidt, S., & Witte, A. D. (2000, January). Welfare reform under PRWORA: Aid to children with working families? *Tax Policy and Economy, 14*, 169. Retrieved from http://www.nber.org/chapters/c10850.pdf

[3] Department of Health and Human Services, Administration for Children and Families. (1998, July 24). Child Care and Development Fund; Final rule. *Federal Register, 63*(142), 39958. Retrieved from http://www.acf.hhs.gov/sites/default/files/occ/fr072498.pdf

[4] HHS Administration of Children and Families. (n.d.). Reimbursement and family fees. In *"FUN"damentals of CCDF Administration* (p. 1). http://www.acf.hhs.gov/sites/default/files/occ/fundamentals_of_ccdf_administration.pdf

[5] *Federal Register*, p. 39958.

what areas constitute a market, and the procedures for determining a market rate estimate.

In California, welfare reform legislation was realized in 1998 as the California Work Opportunity and Responsibility to Kids (CalWORKs) program, which also uses market rate surveys to determine funding for child care subsidies. A statewide Market Rate Survey conducted every two years collects the data necessary to determine the reimbursement ceilings for defined geographic areas. Since 2005, county- or sub-county-level estimates of reimbursement ceilings have been calculated based on the "Market Profiles" within a county. A Market Profile is a grouping of ZIP codes that have similar socioeconomic characteristics (e.g., similar housing costs, population density, employment rates) determined by statistical analysis of U.S. Census data.

County estimates are then calculated as a weighted average of the estimates of the Market Profiles within that county. Since child care costs vary significantly depending on the care setting and the age of the child served, these ceilings are calculated for the following:

Type of Care—Is the child receiving services from an LCC, LFCH, or license-exempt provider?

Age of Child—Is the child an infant (i.e., under two years of age), a pre-schooler (i.e., between the ages of two and four), or of school age (i.e., age five and older)?

Time Categories—What is the cost for care (by age and care setting) if fees are calculated hourly, daily, part-time weekly, full-time weekly, part-time monthly, or full-time monthly?

The importance of accurately and consistently determining these rates cannot be overstated. It is critical that these estimates of child care market rates be accurate and reliable; too high of an estimate would result in an inefficient disbursement of public money, while too low of an estimate would result in families not receiving access to appropriate child care providers. A statistically valid sampling plan—along with a reliable, valid survey instrument and a rigorous data collection strategy—are necessary to produce accurate estimates for small geographic units throughout California.

B. THE 2018 MARKET RATE SURVEY METHODOLOGY

The California Department of Education (CDE) hired ICF to conduct the 2018 Market Rate Survey, requiring that the company employ the same methodology as utilized since the 2005 iteration. Details of the implementation of this approach can be found in *Section 3. Methodology and Survey* Outcomes. In general, the 2018 Market Rate Survey's methodological approach can be summarized as follows:

1. ***Definition of the Population:*** The 2018 Market Rate Survey defined the survey population as all LCCs and LFCHs, including those that contracted directly with the CDE (as many of these serve families who pay the full market rate without subsidies). LCCs and LFCHs that only served subsidized children were excluded from the survey population.

2. ***Sample Frame Development:*** ICF created a list, or "frame," of the population universe using both the R&R lists of child care providers and the state's Community Care Licensing (CCL) database. In creating the frame, individual providers who appeared on either list were included, and only duplicate listings were removed.

3. ***Market Profile Approach for Sampling and Estimating:*** Market Profiles are groupings of ZIP codes with similar socioeconomic characteristics (e.g., similar housing costs, population density, employment rates). The ZIP code groupings are determined by statistical analysis of U.S. Census data. An overview of the development of Market Profiles can be found in *Section 3.A. Updating Market Profiles*.

4. ***Mixed-Mode Data Collection Strategy:*** Identical to the 2014 and 2016 iterations, ICF employed a multi-contact approach to collect the data, using mail, web, and telephone modes.

   The mail methodology closely followed the Total Design Method, pioneered by Don Dillman of Washington State University.[6] This multiple-contact method achieves high levels of response for mail and web surveys. This data collection protocol consisted of up to five possible contacts:

   Pre-notification Letter

   - ICF mailed a letter to providers to introduce the survey and alert them to an upcoming survey packet.
   - There were two versions of this letter: one for LCCs (in English), and one for LFCHs (full text in English and in Spanish, with statements indicating that respondents should contact ICF if they would like to receive the survey in Spanish or any other language).
   - This letter, as well as all subsequent mail contacts, also contained the URL for the web survey.

   First Survey Contact

   - Approximately one week later, survey packets (including cover letter, survey instrument, and a postage-paid return envelope) were mailed to all sampled providers.
   - LCCs received this survey packet in English only, while LFCHs received the packet in English and in Spanish, with statements indicating that respondents should contact ICF if they would like to receive the survey in Spanish or any other language.

[6] Dillman, D. A., Smyth, J. D., & Christian, L.M. (2014). Internet, mail and mixed-mode surveys: The tailored design method (4th ed.). Hoboken, NJ: John Wiley & Sons.

Postcard

- The postcards thanked providers who had returned a survey and encouraged those who had not to return a completed survey.
- These postcards were sent out approximately a week and a half after the first survey packet was mailed; they were mailed to all sampled providers.

Second Survey Contact

- Approximately two weeks later, a second survey packet was mailed to non-responding providers. This survey packet was identical to the first.

Final Letter

- A final reminder letter was sent approximately one week after the second survey mailing. It thanked respondents who had already responded and alerted those who had not yet responded that they would receive a follow-up call to complete the survey over the phone.

Telephone Contact

- Two weeks after the second survey packet, ICF contacted non-responders by telephone and attempted to complete an interview during the call.

Web Mode

- The web mode was added during the 2014 iteration in response to multiple requests from providers for a web option during the 2012 iteration.
- The survey URL and provider-specific identification number were included in all survey mail materials as an alternative to completing the survey by mail.
- Providers were required to use their provider-specific identification number to access the secure survey.

5. ***The 2018 Survey Instrument:*** The 2018 Market Rate Survey used survey instruments for both the LCCs and the LFCHs administered in three modes: mail, CATI (Computer-assisted Telephone Interviewing), and web. The 2018 iteration used instruments similar to those updated in 2014. However, this year the questionnaire included a new question on the Subsidized Child Care Program.

METHODOLOGY AND SURVEY OUTCOMES

This chapter describes the implementation of the 2018 Market Rate Survey and consists of the following sections, corresponding to each aspect of the research design:

Updating Market Profiles,

Sampling,

Questionnaire design and cognitive interviews,

Data collection, and

Data processing and quality control.

A. UPDATING MARKET PROFILES

DEVELOPING MARKET PROFILES (2005–2012)

Market Profiles are non-contiguous groupings of ZIP codes that are similar in terms of socioeconomic and demographic characteristics. Market Profiles serve two functions in the Regional Market Rate Survey. First, they support rate estimation—county-level rates are based on aggregates of standardized rates computed at the Market Profile level, and rates for ZIP codes are set according to their respective Market Profile rates. Second, and to support these rate estimates, Market Profiles are used to define sampling strata during the sampling phase.

Ideally, Market Profiles would be constructed by clustering ZIP codes based on similarities among ZIP code-level child care rates. However, rate data are not available for all ZIP codes, since these data come from a sample survey. In contrast, sociodemographic U.S. Census data are available for the entire state at detailed geographies, including ZIP Code Tabulation Areas (ZCTAs).[7] These data provide a means to cluster ZIP codes into Market Profiles based on the underlying assumption that there is a relationship between these sociodemographic variables and child care rates.

The philosophy behind this estimation strategy is the belief that the geographic location of a child care provider is less predictive of child care rates than the socioeconomic and demographic characteristics in the location. Thus, by grouping small geographic areas with similar sociodemographic characteristics, groups of providers homogeneous with respect to the characteristics driving child care rates are formed, thereby allowing for improved market rate estimates and better allocation of available funds.

The initial classification of ZCTAs into Market Profiles performed in 2005 was based on a Classification and Regression Tree (CART) analysis. This method builds a classification tree—a set of rules—that groups ZCTAs in a manner that maximizes their ability to predict child care rates.

[7] ZCTAs are not identical to ZIP codes, although they generally cover very similar areas. For the purposes of this analysis, however, they were assumed to be the same. For a more detailed discussion, see Appendix A.

The 2005 analysis resulted in a set of 13 profiles for LCCs and 25 profiles for LFCHs, which were used in that survey cycle and again for the 2007 survey.

In 2009, the profiles were reviewed to evaluate their ability to discriminate between various child care price levels. This evaluation was based on an examination of within- and between-profile variability in child care rates and resulted in a reorganization of the Market Profile structure. Specifically, Market Profiles were collapsed together if they could be logically combined based on the original structure and were homogeneous with respect to child care rates (and sociodemographic characteristics). The simplified model (with collapsed profiles) was compared to the more complex model (with uncollapsed profiles) in terms of ability to explain child care price variability using a likelihood ratio test. If the more complex model did not provide a significant improvement, the Market Profiles were collapsed.

This analysis resulted in combining several of the profiles, resulting in eight distinct profiles for LCCs and 12 for LFCHs.

In 2012, the sociodemographic data underlying the profile development was updated, as 2010 U.S. Census data had become available. An initial analysis re-creating the classification trees that defined the Market Profiles revealed that there was little predictive power in the updated variables; that is, these variables did not account for much of the variability in child care rates measured in the previous survey cycle. As a result, the existing definitions were entered into an analysis like that conducted in 2009. This analysis resulted in combining profiles yet again, resulting in four profiles for LFCHs and four profiles for LCCs.

UPDATING MARKET PROFILES (2014–2016)

Since the original market profile model had been reduced to only four Market Profiles, ICF conducted a more in-depth investigation of the classification and regression tree method in 2014. The analysis updated data to over 500 socioeconomic measures from the Census Bureau 2008–2012 American Community Survey five-year, the Census Bureau 2011 Business Patterns, and the CDE 2012 Base Academic Performance Index (API). However, using these data to predict the 2012 child care rates using the CART methodology did not produce Market Profiles with distinctly different child care rates. Given this result, ICF formed Market Profiles using a clustering methodology that minimized the variability of the socioeconomic factors within the market profile. This resulted in seven Market Profiles with varying levels of child care rates.

The main challenge with the 2014 methodology was the complexity of using so many socioeconomic factors to develop the profiles. Therefore, for the 2016 survey, we conducted additional analyses and developed a process to identify which of the 500+ socioeconomic factors were key drivers of child care rates. We used this same process for the 2018 survey, which we summarize here.

2018 MARKET PROFILES

To determine the key drivers for the 2018 Market Profiles, we calculated a ZIP code summary measure that combines homes and centers. The summary measure was based

on the mean full-time pre-school weekly rate for the previous two years (2014 and 2016). Two years of data provide more data points to improve the statistical reliability of the analysis. The mean was weighted by the number of pre-schoolers cared for by the provider. We then conducted the analysis in three steps:

1. First, we calculated the correlation of the socioeconomic measures with the ZIP code child care rate measure. The socioeconomic measures were derived from the 2012–2016 U.S. Census Bureau's American Community Survey (ACS). We kept all socioeconomic variables that had a correlation coefficient of 0.2 or more.

2. Next, we conducted a correlation analysis with the remaining socioeconomic variables and identified those that were highly correlated with each other. We found 34 groupings, each measuring a different socioeconomic factor. From each of these groups, we selected one variable to represent that sociodemographic dimension. In addition, we included all variables from the 2016 market profile model.

3. Finally, we used the remaining socioeconomic variables in a regression model to predict ZIP code child care rates. Using these rates, we classified the ZIP codes into deciles: 1 = lowest 10% (lowest predicted rates), 2 = second 10%, …, and 10 = highest 10% (highest predicted values).

The deciles of predicted child care rates were the basis for the 2018 Market Profiles, formed from socioeconomic characteristics related to child care rates. Note, we collapsed the first two deciles due to a low number of providers. This resulted in nine Market Profiles for 2018.

B. SAMPLING

SAMPLE FRAME POPULATION

As was the case in previous survey iterations, the 2018 Market Rate Survey incorporated providers who contracted directly with the State of California to include the rates paid by private paying families in these programs. Sampled providers were screened to determine if their program included private payment arrangements and subsidized children; those with only subsidized children in their program were deemed ineligible, and their rates and enrollment figures were not collected.

The sample frame was designed and created to include the following providers in the State of California:

- All LCCs with a license to provide care to infants, pre-schoolers, and/or school-age children;
- Large family day care homes; and
- Small family day care homes.

SAMPLE FRAME DEVELOPMENT

The survey sample frame consists of provider data from two primary sources:

1) The CCL database of licensed child care facilities provided by CDE, and

2) Lists of active child care providers maintained by California's R&Rs.

To develop the 2018 frame, ICF performed an initial comparison on overall characteristics between the 2016 survey sample frame and the CCL database provided by the CDE, which had most recently been updated in October 2017. Based on this analysis, ICF determined that the CCL database was more complete and, therefore, an ideal starting point. ICF then implemented the following steps to incorporate suggested updates provided by the R&R agencies to enhance the frame:

- Newly licensed providers were added from the CCL database and provider lists acquired from the R&R agencies.
- ICF sent a modified version of the 2017 CCL provider list with contact information to R&Rs, asking them to review for completeness and provide updated contact information as available.
- R&Rs that did not provide updated information using this modified provider list were asked to send county-specific lists or databases of providers to augment the CCL provided by the CDE. ICF performed a side-by-side comparison for each of these instances, indicating any new information.
- ICF received updates representing 54 of the 58 counties sampled.

The CCL database contains duplicate records, particularly for centers, as each facility has a different license number (labeled *facility number* in the database) for each license type: infant (30), pre-school (50), school-age (40). A single LFCH may also have multiple listings, particularly those which began with a small home license and then acquired a large home license. ICF created a program to (1) match exact duplicates on name, address, and telephone number; and (2) create lists of possible (but not exact) matches for review. This was done iteratively, by county:

- First, each license type was de-duplicated against itself, keeping the most recent license (and accompanying contact information) based on the license date.
- Next, infant license types were de-duplicated against school-age ones to create an intermediary centers file.
- Then, the intermediary file was de-duplicated against the pre-school facilities to create a final centers file.

Afterward, ICF combined the R&R source files into one statewide database representing R&R agency information. ICF compared this list to the de-duplicated CCL database to construct the final, comprehensive sample frame. In doing so, decisions regarding the de-duplication were inclusive, rather than exclusive:

- Providers appearing in only one source were included in the frame.

- Providers appearing in both sources were considered to be the same provider only if they matched on two data points (name and either address or telephone number).

As was the case in previous administrations, this approach created as inclusive a frame as possible—but this approach also resulted in large numbers of respondents who were found to be ineligible or who could not be reached because of inaccurate contact information.

- ICF's sample frame construction process did include steps to mitigate these effects—reducing the number of duplicate records and using the most recent contact information for respondents:

- ICF staff visually examined sample records for each county for duplicate entries by name and address. ICF also developed a program code specifically for this process that matched records and identified duplicates for removal.

- Where conflicting contact information existed between the two sources (e.g., a provider's name and address matched, but the two sources had different telephone numbers), R&R agency information was used, because this information was more recent and assumed to more closely reflect the active current provider population.

- While providers appearing in the CCL database but not in R&R lists were not assumed to be inactive, in many cases R&R agencies provided updates to the R&R Network list indicating that certain providers had become inactive in the past year. Records that could be positively identified as inactive were removed from the frame.

Stratification

Prior to sample selection, the providers on the frame were stratified by Market Profile. LCCs were sub-stratified based on whether they were licensed for infants, school-age children, or pre-schoolers. Stratification ensures that precision targets are achieved for estimates within each of the strata—in this case, for estimates within Market Profiles and age categories.

Sample Selection and Allocation

For each stratum (and sub-stratum), ICF selected two systematic random samples: one of LCCs and a second of LFCHs. Before selecting the samples, ICF sorted the sampling frame by region, county, and ZIP code, which provided an implicit geographic stratification.

Selecting a systematic sample involves randomly selecting a starting point from a sampling frame and then systematically selecting every *m* records until the end of the frame, where *1-in-m* was the sampling interval. The starting point, or random start (RS), is determined by generating a random number between zero and one and multiplying by the sampling interval, or take-every (TE). The TE is named after the systematic portion of the sampling where every m^{th} record is taken. The TE was determined by dividing the total number of records by the target sample size. The full algorithm for selecting a

systematic sample is given below. ICF used SAS Proc SurveySelect, which implements this algorithm, to draw the sample:

- Sort the providers (LCCs or LFCHs) by region, county, and ZIP code.
- Assign each record an index number from one to *N*, where *N* is the total number of providers (either LCCs or LFCHs).
- Calculate the sample size adjusted for expected non-response, *n*' = *n/r*, where *n* is the target number of completes and *r* is the estimated response rate.
- Calculate the TE and RS:
  - TE = N/n'.
  - RS = TE*RN, where *RN* is a random number between 0 and 1, 0<RN≤1.
  - Calculate a sequence of *n'* numbers starting with the RS and adding a TE each time: RS, RS+TE, RS+2TE, ..., RS+(n'-1)TE, RS+(n')TE.
- Round the sequence numbers up to the nearest integer.
- Extract the sample records with index numbers equal to one of the sequence number.

Centers (LCCs)

For allocating sample to the strata of age category and provider type, ICF set a target of ±3.0% based on the relative margin of error for a 95% confidence interval around a pre-schooler child care rate estimate. A coefficient of variation (CV) of 0.3 and a response rate of 37% was assumed when allocating sample to strata for LCCs. For an estimated child care rate of $150 per pre-schooler, this allocation provides sample sufficient to within 3.0% of the estimated value [$145.50, $154.50].

For allocating to the sub-stratum level, ICF oversampled the infant and school-age providers relative to the pre-schooler-only sub-stratum, as most providers provide pre-school care, but not all providers provide infant or school-age care. For infants, ICF oversampled at a rate of 2:1 and for school-age at a rate of 1.5:1. The resulting allocation is in Table 3-1.

Table 3-1: Sample Allocation for LCCs

Stratum	Sub-stratum	Frame	Sample
Overall	Total	9,974	6,890
Overall	Infant provider	1,113	1,081
Overall	Non-infant school-age provider	1,035	866
Overall	Pre-school only	7,826	4,943
2	Total	393	378
2	Infant provider	48	48
2	Non-infant school-age provider	58	55

Table 3-2: Sample Allocation for LCCs (continued)

Stratum	Sub-stratum	Frame	Sample
2	Pre-school only	287	275
3	Total	505	491
3	Infant provider	59	56
3	Non-infant school-age provider	27	26
3	Pre-school only	419	409
4	Total	956	794
4	Infant provider	103	99
4	Non-infant school-age provider	64	61
4	Pre-school only	789	634
5	Total	1,214	850
5	Infant provider	139	133
5	Non-infant school-age provider	114	105
5	Pre-school only	961	612
6	Total	1,196	833
6	Infant provider	131	128
6	Non-infant school-age provider	100	87
6	Pre-school only	965	618
7	Total	1,312	872
7	Infant provider	153	150
7	Non-infant school-age provider	119	101
7	Pre-school only	1,040	621
8	Total	1,529	897
8	Infant provider	180	173
8	Non-infant school-age provider	214	161
8	Pre-school only	1,135	563
9	Total	1,494	896
9	Infant provider	188	185
9	Non-infant school-age provider	175	132
9	Pre-school only	1,131	579
10	Total	1,375	879
10	Infant provider	112	109
10	Non-infant school-age provider	164	138
10	Pre-school only	1,099	632

Homes (LFCHs)

For allocating sample to the strata, ICF set a target of ±3.0% based on the relative margin of error for a 95% confidence interval around a pre-schooler child care rate estimate. A CV of 0.3 and a response rate of 40% was assumed when allocating sample to strata for LCCs. For an estimated child care rate of $150 per pre-schooler, this allocation provides a sample sufficient to be within 3.0% of the estimated value [$145.50, $154.50]. The resulting allocation is in Table 3-3.

Provider type was not available in the sampling frame, so there was no sub-stratification.

Table 3-3: Sample Allocation for LFCHs

Stratum	Frame	Sample
Total	27,710	8,009
2	795	725
3	2,109	865
4	4,401	945
5	4,404	946
6	4,429	946
7	3,934	936
8	3,145	914
9	2,802	901
10	1,691	831

C. Data Collection

In order to maximize response, ICF contacted providers multiple times by mail and, when needed, by telephone. These data collection steps, dates, and quantities are provided in Table 3-4.

Table 3-4: 2018 Data Collection Steps, Dates, and Quantities

Data Collection Step	Date	Quantity
Pre-Notification Letter	April 27, 2018	6,890 LCCs 8,009 LFCHs
First Survey Contact	May 4, 2018	6,890 LCCs 8,009 LFCHs
Reminder Postcard	May 10, 2018	6,705 LCCs 7,944 LFCHs
Second Survey Contact	May 18, 2018	6,606 LCCs 7,924 LFCHs
Final Letter	May 25, 2018	6,503 LCCs 7,855 LFCHs
Telephone Contact	May 31–June 30, 2018	5,085 LCCs 6,523 LFCHs

MAIL SURVEY

Sampled providers were initially contacted via mail.

Mail Materials

Mail contacts were designed to maximize response, and were printed and mailed by our Disabled Veteran-Owned Business Enterprise partner, Source One Communications. The mail survey materials consisted of these characteristics:

- Pre-notification letters were printed on letterhead displaying the CDE logo in red ink, personalized with the provider's name for LFCH, and addressed to the Director for LCC. Pre-notification letters to LCCs were printed in English; pre-notification letters to LFCHs were printed double-sided, with one side in English and the other in Spanish. The pre-notification letters also included a web survey URL and the unique identification number needed to access the survey online.
- The survey packet included (1) a cover letter, (2) the survey, and (3) a business reply envelope. The cover letter design mirrored that of the pre-notification letters. The survey instrument was two pages and printed as a single sheet of paper, double-sided. For LFCHs, both English and Spanish versions of the survey were included in each packet.
- The standard-sized postcard was printed in black ink, personalized with the provider's name for LFCH, and addressed to the Director for LCC.
- Outgoing envelopes displayed the approved CDE logo printed in red ink and were mailed using first-class, pre-sort mail.

Tracking and Entering Mail Returns

ICF used a sample-tracking database to track mail returns and completed surveys. This system directly linked the mail survey receipt control system to the telephone survey sample, as well as to the master sample frame database. Mail returns marked as either "Insufficient Address" or "Vacant" were assigned special dispositions and excluded from the telephone survey.

Mail returns were processed daily and logged in the sample-tracking database. All surveys returned were checked in by master ID (the unique number assigned to each record), and determined to be usable or unusable based on visual examination of the questionnaire (unusable questionnaires were blank, illegible, unreadable due to damage, etc.). Unusable surveys remained in the active telephone sample, while usable ones were given a terminal disposition so that the provider would not be called during the telephone survey.

ICF developed a custom data entry program for completed mail surveys, which was linked to the telephone data collection system.

WEB SURVEY

A web survey option was offered as part of the 2018 Market Rate Survey protocol. No contacts were made via e-mail. Instead, providers were invited to access the URL that

was printed in all mail materials. When respondents logged on through the URL, they were instructed to enter their nine-character master ID included in the mailings to complete the survey securely online. Similar to mail survey returns, completed web surveys were logged and tracked.

TELEPHONE SURVEY

Outbound telephone data collection started after the mail/web survey methodology was completed, and was conducted by ICF telephone interviewers in our Martinsville, VA call center.

Interviewer Training

All interviewing staff (which included English-speaking and bilingual interviewers fluent in Spanish) participated in project-specific training. This training included explanation of the survey's background and purpose, overall design, and data collection protocols. Trainers also reviewed each question within the survey instrument in detail, covering each question's purpose, defining key concepts used in questions, discussing appropriate probes, and explaining how to accurately record responses. After the lecture portion of the training agenda was completed, interviewers took part in a "practice shift" that involved working through the questionnaire on the CATI system and reviewing different possible interview scenarios.

Telephone Survey Protocols

ICF implemented the following telephone protocols for the 2018 Market Rate Survey:

- **Number of Attempts:** To reach an eligible provider for each working telephone number in the sample frame, interviewers made a maximum of 15 attempts for LFCHs and 11 attempts for LCCs. Additional attempts were made beyond the maximum if a respondent requested additional call-backs. No more than one attempt was made on any telephone number in a day, except in the cases where a respondent requested a specific appointment, or the line was busy. The level of effort, in terms of attempts made on sampled records, is as follows in Table 3-5.

Table 3-5: Number of Attempts

Complete Type	Minimum Number of Attempts	Maximum Number of Attempts*	Average Number of Attempts
LCCs	1	19	9
LFCHs	1	18	8

*In some cases, additional attempts were made when respondents asked for a call-back.

- **Calling Period:** Each number was called a maximum of times 18 times for LCFHs and 19 times for LCCs over a four-week calling period or until a completed interview or other final outcome (e.g., refusal) was achieved. The days and times each number was called were distributed throughout the calling period, ensuring adequate coverage of weekdays, weeknights, and weekends. Note: LCCs were

only contacted on the weekend if a weekend appointment was requested by the provider.

- **Lines with a Busy Signal or No Answer:** ICF's CATI system automatically handles call-backs for "no answer" and "busy" outcomes.
    - Lines with a busy signal were called back a minimum of two times in a calling session at 20-minute intervals. If the line was still busy after the second attempt, the number was dialed again during the next calling shift, until the record was resolved.
    - Interviewers left messages on answering machines and voice mail systems. They identified themselves as calling on behalf of the CDE from ICF and left the toll-free number, along with the sample member's master-ID number.
    - Privacy managers, call blocking, and caller ID represent a growing challenge for telephone survey research. ICF implemented the following protocols to minimize the impact of these consumer technologies on response rates:
        - When interviewers received a recorded message for a privacy manager, and were presented with the opportunity to say a name or leave a message for the provider, the interviewers said, "calling on behalf of the California Department of Education."
        - Some consumers use privacy managers to avoid telephone solicitation. When interviewers received a recorded message for a privacy manager that permitted non-solicitation calls to continue by pressing one, interviewers did so.
- **Appointments for Call-backs:** Respondents could request that an interviewer call them back at a more convenient time. If a cooperative respondent had to terminate an interview, but wanted to finish later, it was possible to set a definite call-back for an exact time and restart the interview where it left off; if the interviewer who began the survey was available, the system sent the call-back to that interviewer.

Minimizing Non-Response

ICF's project team employed several strategies to minimize telephone survey non-response. These strategies counter the two main sources of survey non-response—inability to contact a respondent and unwillingness of respondents to cooperate—through optimal call scheduling techniques and the close monitoring and tracking of interviewer performance.

- **Interview Times:** Interviewing session hours were scheduled for 7 a.m. to 6 p.m. on weekdays, and noon to 6 p.m. Pacific time on weekends (LCC by appointment only on weekends). Calls were rotated throughout the morning, mid-day, and afternoon calling times. Appointments were scheduled for interviews outside of these times at the respondent's request.

- **Distribution of Attempts:** The calls were distributed so that they were attempted at different times of the day, on different days, and in different weeks. ICF's interviewing schedule and CATI system software ensured that numbers included in the sample were distributed properly. Many records generally received more than the minimum number of calls. LCCs were not called on weekends, but LFCHs were.
- **Tracking Interviewer Performance:** ICF developed a set of reports to track individual interviewer performance—particularly in converting refusals, screening samples for eligibility, and completing interviews. Call center management staff used these reports to further coach interviewers to improve their performance. Whenever a respondent refused to be interviewed or terminated an interview in progress, the interviewer attempted to determine why and entered this information in the CATI system. ICF compiled these case histories and reviewed them to identify specific plans of action for these cases.

Foreign Language Interviews

ICF administered the telephone survey in English and in Spanish (see Table 3-6). Respondents were given the option to complete the survey in their preferred language by dialing the dedicated toll-free project helpline provided in each mail communication. During the 2018 iteration, ICF received two language requests—Farsi and Chinese (specific dialect was not identified). However, these respondents chose to complete the survey in English via mail prior to a call being set up in their preferred language.

Table 3-6: Total Number of Completed Interviews by Language

Language	LFCH Completes	LCC Completes	Total Completes	Overall Percent
English	2,449	3,175	5,624	92%
Spanish	500	0	500	8%
Total	**2,949**	**3,175**	**6,124**	**100.00%**

SURVEY OUTCOMES

Telephone, mail, and web data collection ended on June 30, 2018. In all, ICF received 3,175 valid interviews from the 6,890 LCC records. Of those completes, 1,562 were obtained through the mail survey, 1,063 were obtained through the web survey, and 550 were obtained through the telephone survey. Similarly, ICF received 2,949 valid interviews from the 8,009 LFCH records. Of those completes, 2,073 were obtained through the mail survey, 460 were obtained through the web surveys, and 416 were obtained through the telephone survey.

Final Sample Status

Table 3-7 and Table 3-8 illustrate the final sample disposition codes at the end of data collection for LCCs and LFCHs.

Table 3-7: Final Status of LCC Sample

Status	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Mail complete	1,562	22.67%	1,562	22.67%
Web complete	1,063	15.43%	2,625	38.10%
Phone complete	550	7.98%	3,175	46.08%
Not in sample area/wrong provider type	115	1.67%	3,290	47.75%
Phone – refused	389	5.65%	3,679	53.40%
Phone – nonworking/fax	284	4.12%	3,963	57.52%
Phone – no one eligible	333	4.83%	4,296	62.35%
Phone – no longer provider	90	1.31%	4,386	63.66%
Phone – reached max attempts	2,504	36.34%	6,890	100%

Table 3-8: Final Status of LFCH Sample

Status	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Mail complete	2,073	25.88%	2,073	25.88%
Web complete	460	5.74%	2,533	31.62%
Phone complete	416	5.20%	2,949	36.82%
Not in sample area/wrong provider type	113	1.41%	3,062	38.23%
Phone – refused	532	6.64%	3,594	44.87%
Phone – nonworking/fax	546	6.82%	4,140	51.69%
Phone – no one eligible	130	1.62%	4,270	53.31%
Phone – no longer provider	360	4.5%	4,630	57.81%
Phone – reached max attempts	3,379	42.19%	8,009	100%

SURVEY STATISTICS

Within the survey research community, the AAPOR has established general guidelines for best practices in calculating survey statistics, such as refusal rates, response rates, and cooperation rates.[8] While AAPOR does not have specific rules for calculating either mixed-mode or listed telephone sample survey statistics, the methods used below are in agreement with their underlying logic and philosophy. Final status codes were grouped into AAPOR categories according to Table 3-9.

Table 3-9: Coding of Final Status to AAPOR Categories

Status	Category
Mail complete	Interview
Web complete	Interview
Phone complete	Interview
Not in sample area/wrong provider type	Ineligible
Phone – refused	Refusal
Phone – language barrier	Other
Phone – physical/mental impairment	Other
Phone – nonworking/fax	Non-contact
Phone – no one eligible	Ineligible
Phone – no longer provider	Ineligible
Phone – reached max attempts	Non-contact

For the 2018 Market Rate Survey, ICF chose to use the AAPOR response rate 1 formula—the most conservative approach to calculating response rates.

RRI = Total Number of Interviews/(Interviews + Partials + Refusals + Non-Contacts + Others + Unknowns)[9]

Response rates were higher in 2018 than in 2016 for LCCs, increasing by seven percentage points (47% in 2018 compared to 40% in 2016). Response rates for LFCHs saw a small increase, from 38% in 2016 to 39% in 2018. Table 3-10 summarizes the response rate overall and by Market Profile for LCCs.

[8] The American Association of Public Opinion Research. (2004). *Standard definitions: Final dispositions of case codes and outcome rates for surveys* (3rd ed.). Lenexa, Kansas.

[9] Although the AAPOR formula references "partials" and "unknowns," these dispositions are not used in the 2018 Market Rate Survey.

Table 3-10: Response Rates and Completed Interviews by Mode for LCCs

Profile	Total Number of Sampled Providers	Ineligible Providers	Total Number of Completed Surveys	Mail Completes	Web Completes	Phone Completes	Response Rate
Overall	6,890	88	3,175	1,562	1,063	550	47%
2	421	9	201	94	79	28	49%
3	590	8	268	119	102	47	46%
4	703	11	290	152	100	38	42%
5	751	9	345	177	112	56	46%
6	850	8	371	179	119	73	44%
7	807	9	372	193	113	66	47%
8	859	13	422	218	126	78	50%
9	938	8	465	222	155	88	50%
10	971	13	441	208	157	76	46%

Table 3-11 summarizes the response rate overall and by Market Profile for LFCHs.

Table 3-11: Response Rates and Completed Interviews by Mode for LFCHs

Profile	Total Number of Sampled Providers	Ineligible Providers	Total Number of Completed Surveys	Mail Completes	Web Completes	Phone Completes	Response Rate
Overall	8,009	354	2,949	2,073	460	416	39%
2	904	69	355	261	43	51	43%
3	873	46	334	228	52	54	40%
4	799	49	311	232	38	41	41%
5	980	35	350	253	52	45	37%
6	844	33	309	209	49	51	38%
7	874	31	312	229	44	39	37%
8	813	23	314	221	52	41	40%
9	879	35	296	202	55	39	35%
10	1,043	33	368	238	75	55	36%

The number of completed interviews by county is presented in Appendix A: Sampled Records and Completed Interviews by County.

D. Data Processing and Quality Control

Data cleaning and preparation occurred after the mail survey data had been entered, and web and telephone fielding periods were completed. After the mail survey data was cleaned, it was formatted according to data layout specifications approved by the CDE. The mail data was then merged with the final CATI and web data files prior to submission. In addition to the automated quality check that runs nightly on the raw data, a full quality review of the final data was performed, and any duplicates across modes were resolved.

ICF submitted complete, clean datasets and codebooks to the CDE. Two datasets and codebooks were created—one for each type of care setting (LCCs and LFCHs). The datasets met all agreed-upon layout specifications and did not contain any provider identifiers.

ANALYSIS

The 2018 Market Rate Survey repeated the methodology used in the previous administrations since 2005. The differences in rates between the 2018 Market Rate Survey and the 2016 Market Rate Surveys are due to general changes in child care rates and differences in the distribution of children across various Market Profiles.

A. CALCULATION OF THE ESTIMATES

ESTIMATION

The study design was developed to support a small area estimation model to estimate percentiles at the county level and set the regional market rates.

The complex estimation scheme involves many steps, including the following:

- Weighting,
- Rate conversions,
- Rate trimming,
- Market Profile price distributions,
- Market Profile percentile estimates,
- Average market price profiles,
- County price distributions, and
- County percentile estimates.

These steps are described in the sections below.

Weighting

The selected sample of providers was the product of a disproportionate sampling design. That is, providers were selected with unequal probabilities. To account for this design feature, ICF developed a base weight equal to the inverse of the probability that a provider is selected. The base weight was adjusted to account for non-responding units. Responding units were sampled records where the provider completed the survey, or ICF established that the sampled record was ineligible; reasons for ineligibility include that the provider no longer provides care, the center was not located in the right geographic area, and the provider type was wrong.

Rate Conversions

In completing the survey, providers had the option of reporting their current rates in hours, days, weeks (full- or part-time), or months (full- or part-time)—or in any combination. Some providers reported rates for all possible time units. For those who did not report in all units, ICF converted the respondent-reported rates to time units.

For LCCs, ICF estimated the full-time conversion factors using the least squares estimator to minimize the difference between the actual monthly rate and the converted

monthly rate. Specifically, ICF found the conversion factor c_t for time t, that minimizes $SS_t=(c_t \times R_t - R_m)^2$, where R_t and R_m were the respondent-reported rates for time unit t and for a month, respectively. The conversion factors were developed using providers who reported both monthly rates and time unit t rates. Conversion factors for part-time weekly and monthly were developed from their full-time counterpart. For facilities only reporting care on a part-time basis, daily and hourly rates were converted from part-time weekly and monthly rates. The pairs of rates that were converted to and from one-another are listed below:

- Hourly ↔ Full-time monthly,
- Daily ↔ Full-time monthly,
- Weekly ↔ Full-time monthly,
- Full-time weekly ↔ Part-time weekly, and
- Full-time monthly ↔ Part-time monthly.

Similarly, for LFCHs, ICF estimated the full-time conversion factors using the least squares estimator to minimize the difference between the actual weekly rate and the converted weekly rate. Pairs of rates that were converted to and from one another are listed below:

- Hourly ↔ Full-time weekly,
- Daily ↔ Full-time weekly,
- Weekly ↔ Full-time weekly,
- Full-time weekly ↔ Part-time weekly, and
- Full-time monthly ↔ Part-time monthly.

Using the conversion factors that result from the models above, ICF then calculated conversion rates for all other combinations of reported and non-reported rate categories. The conversion factors are reported in the tables below.

Once all conversion factors were calculated, ICF then prioritized their use, which was generally based on closeness to other time units. The one exception was the use of hourly rates as a last resort. Hourly rates tended to be least correlated with other rate categories, and were therefore only used when no other rate was reported. This prioritization is indicated in Table 4-1.

Table 4-1: LCC Conversion Factor Prioritization

Type of Schedule	Hourly	Daily	Full-time Weekly	Full-time Monthly	Part-time Weekly	Part-time Monthly
Hourly	N/A	1	2	3	4	5
Daily	5	N/A	1	2	3	4
Full-time Weekly	5	1	N/A	2	3	4
Full-time Monthly	5	2	1	N/A	4	3
Part-time Weekly	5	2	1	4	N/A	3
Part-time Monthly	5	3	4	1	2	N/A

For example, for LCCs, when full-time monthly rates were not reported, full-time weekly rates (if available) were converted to full-time monthly rates; if full-time weekly rates were not available, daily rates (if available) were converted to full-time monthly rates; if daily rates were not available, part-time monthly rates (if available) were converted to monthly rates—and so on. Those not reporting any rates were excluded from the estimation.

Table 4-2: LFCH Conversion Factor Prioritization

Type of Schedule	Hourly	Daily	Full-time Weekly	Full-time Monthly	Part-time Weekly	Part-time Monthly
Hourly	N/A	1	2	3	4	5
Daily	5	N/A	1	2	3	4
Full-time Weekly	5	1	N/A	2	3	4
Full-time Monthly	5	2	1	N/A	4	3
Part-time Weekly	5	2	1	4	N/A	3
Part-time Monthly	5	3	4	1	2	N/A

For example, for LFCHs, when full-time weekly rates were not reported, daily rates (if available) were converted to full-time weekly rates; if daily rates were not available, full-time monthly rates (if available) were converted to full-time weekly rates; if full-time monthly rates were not available, part-time weekly rates (if available) were converted to weekly rates—and so on. Those not reporting any rates were excluded from the estimation.

Table 4-3: Infants Conversion Factors for LCCs

Convert From:	Hourly Full-time	Daily Full-time	Weekly Full-time	Monthly Full-time	Weekly Part-time	Monthly Part-time
Hourly Full-time	N/A	5.1484	20.5304	84.5359	15.7145	60.6451
Daily Full-time	0.1942	N/A	3.9877	16.4197	3.0523	11.7793
Weekly Full-time	0.0487	0.2508	N/A	4.1176	0.7654	2.9539
Monthly Full-time	0.0118	0.0609	0.2429	N/A	0.1859	0.7174
Weekly Part-time	0.0636	0.3276	1.3065	5.3795	N/A	3.8592
Monthly Part-time	0.0165	0.0849	0.3385	1.3939	0.2591	N/A

Table 4-4: Preschool Conversion Factors for LCCs

Convert From:	Hourly Full-time	Daily Full-time	Weekly Full-time	Monthly Full-time	Weekly Part-time	Monthly Part-time
Hourly Full-time	N/A	5.2362	21.4015	85.6977	16.5253	60.5817
Daily Full-time	0.1910	N/A	4.0872	16.3662	3.1559	11.5697
Weekly Full-time	0.0467	0.2447	N/A	4.0043	0.7722	2.8307
Monthly Full-time	0.0117	0.0611	0.2497	N/A	0.1928	0.7069
Weekly Part-time	0.0605	0.3169	1.2951	5.1858	N/A	3.6660
Monthly Part-time	0.0165	0.0864	0.3533	1.4146	0.2728	N/A

Table 4-5: School-Age Conversion Factors for LCCs

Convert From:	Hourly Full-time	Daily Full-time	Weekly Full-time	Monthly Full-time	Weekly Part-time	Monthly Part-time
Hourly Full-time	N/A	5.0927	18.8728	70.0484	13.4054	48.5043
Daily Full-time	0.1964	N/A	3.7058	13.7547	2.6323	9.5243
Weekly Full-time	0.0530	0.2698	N/A	3.7116	0.7103	2.5701
Monthly Full-time	0.0143	0.0727	0.2694	N/A	0.1914	0.6924
Weekly Part-time	0.0746	0.3799	1.4079	5.2254	N/A	3.6183
Monthly Part-time	0.0206	0.1050	0.3891	1.4442	0.2764	N/A

Table 4-6: Infants Conversion Factors for LFCHs

Convert From:	Hourly Full-time	Daily Full-time	Weekly Full-time	Monthly Full-time	Weekly Part-time	Monthly Part-time
Hourly Full-time	N/A	4.4927	19.4061	79.2164	14.5447	58.9074
Daily Full-time	0.2226	N/A	4.3194	17.6322	3.2374	13.1117
Weekly Full-time	0.0515	0.2315	N/A	4.0820	0.7495	3.0355
Monthly Full-time	0.0126	0.0567	0.2450	N/A	0.1836	0.7436
Weekly Part-time	0.0688	0.3089	1.3342	5.4464	N/A	4.0501
Monthly Part-time	0.0170	0.0763	0.3294	1.3448	0.2469	N/A

Table 4-7: Pre-School Conversion Factors for LFCHs

Convert From:	Hourly Full-time	Daily Full-time	Weekly Full-time	Monthly Full-time	Weekly Part-time	Monthly Part-time
Hourly Full-time	N/A	4.5542	19.7256	81.5568	15.0440	60.7228
Daily Full-time	0.2196	N/A	4.3313	17.9081	3.3033	13.3334
Weekly Full-time	0.0507	0.2309	N/A	4.1346	0.7627	3.0784
Monthly Full-time	0.0123	0.0558	0.2419	N/A	0.1845	0.7445
Weekly Part-time	0.0665	0.3027	1.3112	5.4212	N/A	4.0364
Monthly Part-time	0.0165	0.0750	0.3248	1.3431	0.2477	N/A

Table 4-8: Pre-School Conversion Factors for LFCHs

Convert From:	Hourly Full-time	Daily Full-time	Weekly Full-time	Monthly Full-time	Weekly Part-time	Monthly Part-time
Hourly Full-time	N/A	4.2989	18.1569	74.8198	13.9981	55.9376
Daily Full-time	0.2326	N/A	4.2236	17.4043	3.2562	13.0120
Weekly Full-time	0.0551	0.2368	N/A	4.1207	0.7710	3.0808
Monthly Full-time	0.0134	0.0575	0.2427	N/A	0.1871	0.7476
Weekly Part-time	0.0714	0.3071	1.2971	5.3450	N/A	3.9961
Monthly Part-time	0.0179	0.0769	0.3246	1.3376	0.2502	N/A

The conversions serve two purposes. First, the conversions increase the number of rates for calculating the 85th percentiles. Second, the conversion process identifies outlier rates and uses replacement values. For example, the LFCH infant weekly rates ranged from $4 to $1,280. When available, the conversion process finds substitute rates to use in the place of the illogical values.

Generally, the mean for the converted values are similar to the mean of the reported values. Rates that increase from the reported to the converted indicate that there were outlier rates on the low side (e.g., $4 for a weekly rate). Rates that decrease from the reported to the converted indicate that there were outlier rates on the high side (e.g., $1,280 for a weekly rate). The coefficient of variation, a measure of the variability of the

rates, typically goes down from the reported rates to the converted rates. This is the result of replacing illogical outlier rates.

Table 4-9: 2018 LCC Mean Child Care Rate Responses, Weighted by Enrollment

Age and Time	Hourly	Daily	Weekly	Monthly
Infant Full-time	N/A	N/A	$328.11	$1,484.90
Pre-school Full-time	N/A	N/A	$236.26	$1,074.10
School-age Full-time	N/A	N/A	$201.34	$849.21
Infant Part-time	$18.77	$78.96	$235.25	$887.64
Pre-school Part-time	$11.42	$57.43	$164.77	$634.94
School-age Part-time	$9.11	$46.57	$126.00	$397.75

Table 4-10: 2018 LFCH Mean Child Care Rate Responses, Weighted by Enrollment

Age and Time	Hourly	Daily	Weekly	Monthly
Infant Full-time	N/A	N/A	$234.13	$1,038.05
Pre-school Full-time	N/A	N/A	$206.26	$1,015.55
School-age Full-time	N/A	N/A	$169.92	$734.80
Infant Part-time	$11.64	$53.58	$154.11	$722.31
Pre-school Part-time	$9.79	$48.46	$136.35	$657.02
School-age Part-time	$8.48	$38.49	$109.63	$482.05

Table 4-11: 2018 LCC Mean Child Care Rate Responses with Conversions, Weighted by Enrollment

Age and Time	Hourly	Daily	Weekly	Monthly
Infant Full-time	N/A	N/A	$339.15	$1,448.68
Pre-school Full-time	N/A	N/A	$246.07	$1,014.03
School-age Full-time	N/A	N/A	$211.82	$793.06
Infant Part-time	$16.72	$85.52	$233.18	$924.46
Pre-school Part-time	$12.03	$62.65	$170.67	$633.67
School-age Part-time	$9.23	$46.51	$110.68	$400.28

Table 4-12: 2018 LFCH Mean Child Care Rate Responses with Conversions, Weighted by Enrollment

Age and Time	Hourly	Daily	Weekly	Monthly
Infant Full-time	N/A	N/A	$241.09	$976.48
Pre-school Full-time	N/A	N/A	$219.28	$914.59
School-age Full-time	N/A	N/A	$169.49	$708.33
Infant Part-time	$11.60	$54.13	$168.50	$670.84
Pre-school Part-time	$10.93	$51.00	$155.73	$612.39
School-age Part-time	$8.64	$37.50	$117.39	$473.18

Table 4-13: 2018 LCC Coefficient of Variation (in percent) of Child Care Rate Responses, Weighted by Enrollment

Age and Time	Hourly	Daily	Weekly	Monthly
Infant Full-time	N/A	N/A	82.30	132.58
Pre-school Full-time	N/A	N/A	197.44	324.12
School-age Full-time	N/A	N/A	121.07	292.58
Infant Part-time	242.42	134.94	78.48	101.70
Pre-school Part-time	361.36	263.56	192.86	282.00
School-age Part-time	158.32	239.06	161.39	217.48

Table 4-14: 2018 LFCH Coefficient of Variation (in percent) of Child Care Rate Responses, Weighted by Enrollment

Age and Time	Hourly	Daily	Weekly	Monthly
Infant Full-time	N/A	N/A	56.39	67.84
Pre-school Full-time	N/A	N/A	73.84	88.37
School-age Full-time	N/A	N/A	65.90	86.58
Infant Part-time	127.99	75.35	80.26	81.88
Pre-school Part-time	115.48	99.71	87.17	127.64
School-age Part-time	73.23	62.26	85.87	95.48

Table 4-15: 2018 LCC Coefficient of Variation (in percent) of Child Care Rate Responses with Conversions, Weighted by Enrollment

Age and Time	Hourly	Daily	Weekly	Monthly
Infant Full-time	N/A	N/A	95.70	114.27
Pre-school Full-time	N/A	N/A	228.00	264.31
School-age Full-time	N/A	N/A	186.92	228.65
Infant Part-time	138.80	126.42	80.72	82.55
Pre-school Part-time	232.54	211.06	197.52	221.80
School-age Part-time	196.11	213.87	179.16	179.94

Table 4-16: 2018 LFCH Coefficient of Variation (in percent) of Child Care Rate Responses with Conversions, Weighted by Enrollment

Age and Time	Hourly	Daily	Weekly	Monthly
Infant Full-time	N/A	N/A	54.59	58.53
Pre-school Full-time	N/A	N/A	79.49	88.81
School-age Full-time	N/A	N/A	57.46	65.11
Infant Part-time	63.19	59.50	57.89	62.30
Pre-school Part-time	81.24	76.21	80.98	94.86
School-age Part-time	71.68	68.76	60.70	76.90

Rate Trimming

Occasionally, respondent error (such as reporting rates in the wrong location) and/or interviewer error (such as data entry errors) result in outlier values for child care rates. To guard against outliers, ICF established an upper- and lower-bound for each age group and time period. Any reported rate falling outside the bounds was either substituted with an alternative converted reported rate (if available) or set equal to the upper- or lower-bound. The upper- and lower-bounds were established as the 2.5th percentile and the 97.5th percentile reported rates for each age group and time period. Further, when respondents reported the same rate for two separate time periods, we edited the data to best reflect the correct rate category. For instance, a respondent may report that they charge $800 monthly and $800 weekly. In this case, we would accept the $800 as a monthly charge. If the respondent reported $200 monthly and $200 weekly, we would accept the $200 as a weekly charge.

Market Profile Price Distribution

After weighting and the rate conversion, the next step was to develop a price distribution for each Market Profile. This was the weighted distribution of children across increasing price categories.

We identified outliers for the number of children enrolled in each age group. We replaced the child count with the median child count if the number of reported children exceeded Q3+3*IQR, where Q3 is the third quartile and IQR is the interquartile range, IQR = Q3-Q1.

Market Profile Percentile Estimation

Using the price distribution for each Market Profile, ICF estimated percentiles through linear interpolation. For the k^{th} percentile,

$$\hat{P}_k = U_k - \frac{F(U_k) - k/100}{F(U_k) - F(L_k)} \times (U_k - L_k)$$

where L_k = lower-bound of category containing k^{th} percentile

U_k = upper-bound of category containing k^{th} percentile

$F(L_k)$ = cumulative frequency evaluated at L_k

$F(U_k)$ = cumulative frequency evaluated at U_k

For each category of care, the percentile is equal to the percentile upper-bound subtracted by the result of the quotient of the difference between the cumulative percentile upper-bound and the percentile over the difference between the cumulative percentile upper-bound and cumulative percentile lower-bound multiplied by difference between the percentile upper-bound and percentile lower-bound.

Average Price Profile

For estimating percentiles at the county level (or any small area), ICF first developed an average price profile for each Market Profile by dividing the cells in the weighted distribution by the weighted number of providers sampled.

County Price Distributions

Next, ICF developed a county price distribution by matching each provider (sample and non-sample) to the correct Market Profile and adding up the average price profiles for each provider in the county. The result was an estimated price distribution for each county, which was the distribution that serves as the basis for all percentile estimates.

County Percentile Estimates

Finally, after developing an estimated price distribution for each county, ICF estimated percentiles through linear interpolation (as described above).

Variance Estimation

Due to the complex estimation procedure, ICF developed a replication variance estimation scheme referred to as successive difference replication (SDR). The method involves repeatedly selecting subsamples, or replicate samples, from the full sample of providers. Estimates are then calculated for each replicate sample followed by the variance of the replicate sample estimates. The variance of the replicate samples is then used to estimate the variance of the full sample.

B. Comparisons to the 2016 Reimbursement Ceilings

Overall, the 2018 Market Rate Survey indicates that the cost of child care for parents (i.e., the rates charged by providers) has increased throughout the state for both LFCHs and LCCs (see Table 4-17 and Table 4-18). The cost increased by an average of 5.1% for infants in LCCs and 8.6% for infants in LFCHs. For pre-schoolers, the cost increased by 9.6% for LCCs and 5.6% for LFCHs. For school-age children, the average cost increased by 8.4% for LCCs and 10.6% for LFCHs. All the 2016 to 2018 changes were statistically significant.

Table 4-17: 2018 and 2016 County Comparison for LCC Full-time Monthly 85th Percentile

Age Group	2018 Mean County	2016 Mean County	Average Difference	Average Percent Increase	Minimum Difference	Maximum Difference
Infant	$1,513.46	$1,440.48	$72.98	5.1%	-$278.99	$310.60
Pre-school	$1,089.23	$994.23	$95.00	9.6%	-$222.63	$299.28
School-age	$900.94	$830.76	$70.18	8.4%	-$145.75	$519.89

Table 4-18: 2018 and 2016 County Comparison for LFCH Full-time Weekly 85th Percentile

Age Group	2018 Mean County	2016 Mean County	Average Difference	Average Percent Increase	Minimum Difference	Maximum Difference
Infant	$256.52	$236.18	$20.34	8.6%	-$42.85	$61.04
Pre-school	$231.33	$219.11	$12.22	5.6%	-$62.75	$56.75
School-age	$202.69	$183.33	$19.36	10.6%	-$24.10	$76.73

The five counties with the largest decreases and the largest increases are listed in Table 4-19 thru Table 4-22 for each age group. For LCCs, the rankings are based on monthly rates; for LFCHs, the rates are based on weekly rates.

Table 4-19a: The Five Counties with the Largest LCC Monthly Rate Decrease

Infant	2016	2018	%Diff
DEL NORTE	1152.02	904.71	-21.47%
MODOC	1152.02	904.71	-21.47%
TRINITY	1152.02	904.71	-21.47%
PLUMAS	1152.02	904.71	-21.47%
LASSEN	1152.02	904.71	-21.47%

Table 4-19b: The Five Counties with the Largest LCC Monthly Rate Decrease

Pre-school	2016	2018	%Diff
MONO	1458.15	1235.52	-15.27%
DEL NORTE	848.15	722.03	-14.87%
PLUMAS	838.32	722.03	-13.87%
LASSEN	798.71	722.03	-9.60%
AMADOR	839.24	792.47	-5.57%

Table 4-19c: The Five Counties with the Largest LCC Monthly Rate Decrease

School-age	2016	2018	%Diff
DEL NORTE	651.22	513.11	-21.21%
MODOC	651.22	513.11	-21.21%
TRINITY	651.22	513.11	-21.21%
PLUMAS	651.22	513.11	-21.21%
LASSEN	651.22	513.11	-21.21%

Table 4-20a: The Five Counties with the Largest LFCH Weekly Rate Decrease

Infant	2016	2018	%Diff
MARIPOSA	253.99	211.14	-16.87%
KINGS	213.12	204.02	-4.27%
PLUMAS	211.83	204.91	-3.27%
DEL NORTE	211.15	204.79	-3.01%
IMPERIAL	210.04	204.48	-2.65%

Table 4-20b: The Five Counties with the Largest LFCH Weekly Rate Decrease

Pre-school	2016	2018	%Diff
MARIPOSA	240.62	177.86	-26.08%
DEL NORTE	194.39	176.35	-9.28%
PLUMAS	193.40	175.85	-9.07%
IMPERIAL	191.41	179.14	-6.41%
KINGS	194.67	183.16	-5.91%

Table 4-20c: The Five Counties with the Largest LFCH Weekly Rate Decrease

School-age	2016	2018	%Diff
SAN LUIS OBISPO	290.23	266.13	-8.30%
ALPINE	216.33	202.26	-6.50%
CALAVERAS	180.07	179.80	-0.15%
MADERA	202.45	202.85	0.19%
MARIPOSA	203.19	204.28	0.54%

Table 4-21a: The Five Counties with the Largest LCC Monthly Rate Increase

Infant	2016	2018	%Diff
SUTTER	1194.53	1505.13	26.00%
CALAVERAS	1152.02	1379.73	19.77%
EL DORADO	1540.33	1827.24	18.63%
ALPINE	1152.02	1362.32	18.26%
MADERA	1152.02	1362.08	18.24%

Table 4-21b: The Five Counties with the Largest LCC Monthly Rate Increase

Pre-school	2016	2018	%Diff
ALPINE	707.99	983.40	38.90%
EL DORADO	1010.91	1310.19	29.61%
MADERA	707.99	909.84	28.51%
COLUSA	707.99	883.35	24.77%
PLACER	995.00	1201.29	20.73%

Table 4-21c: The Five Counties with the Largest LCC Monthly Rate Increase

School-age	2016	2018	%Diff
MARIN	1040.73	1560.62	49.95%
SAN MATEO	1042.45	1555.33	49.20%
SANTA BARBARA	1019.89	1482.14	45.33%
SANTA CLARA	1043.00	1488.16	42.68%
SANTA CRUZ	1037.87	1450.87	39.79%

Table 4-22a: The Five Counties with the Largest LFCH Weekly Rate Increase

Infant	2016	2018	%Diff
EL DORADO	251.47	312.50	24.27%
SONOMA	254.08	303.09	19.29%
NAPA	251.07	299.01	19.09%
VENTURA	254.12	292.66	15.17%
PLACER	251.72	289.44	14.98%

Table 4-22b: The Five Counties with the Largest LFCH Weekly Rate Increase

Pre-school	2016	2018	%Diff
EL DORADO	229.31	286.06	24.75%
ALAMEDA	312.79	365.01	16.69%
NAPA	229.93	266.91	16.09%
ORANGE	279.42	321.66	15.12%
LOS ANGELES	252.60	289.76	14.71%

Table 4-22c: The Five Counties with the Largest LFCH Weekly Rate Increase

School-age	2016	2018	%Diff
ALAMEDA	252.58	329.36	30.38%
SANTA CLARA	251.45	326.28	29.76%
NAPA	203.63	250.43	22.98%
ORANGE	225.33	274.49	21.82%
SAN FRANCISCO	287.02	346.73	20.80%

C. Survey Instrument and Modes

Both the Homes and Centers survey instruments were revised slightly in 2018. The General Information section was reorganized to make room for a new question on whether the center participates in the Subsidized Child Care Program, and if not, the reasons for not participating. The Rates section included a new question asking providers whether they have a policy to charge parents the balance between the child care subsidy reimbursement rate and the full private pay rate. The Comment section featured in the 2016 survey version was removed to make space for these additions after confirming its high nonresponse in previous cycles.

As shown in Table 4-23 and Table 4-24, both LCCs and LFCHs showed a preference for responding by mail (49% of LCCs and 70% of LFCHs chose that mode). One-third of LCCs used the web mode, with the final 17% completing by telephone. Fifteen percent of LFCHs responded by web, 14% by telephone. In 2018, web surpassed phone as the second most popular response mode.

Table 4-23: Analysis of Completed Surveys by Mode and Market Profile for LCCs

Market Profile	Total Sample	Completed Surveys	Mail Completes	Percent Completes from Mail	Web Completes	Percent Completes from Web	Phone Completes	Percent Completes from Phone
Overall	6,890	3,175	1,562	49.2%	1,063	33.5%	550	17.3%
2	421	201	94	46.8%	79	39.3%	28	13.9%
3	590	268	119	44.4%	102	38.1%	47	17.5%
4	703	290	152	52.4%	100	34.5%	38	13.1%
5	751	345	177	51.3%	112	32.5%	56	16.2%
6	850	371	179	48.2%	119	32.1%	73	19.7%
7	807	372	193	51.9%	113	30.4%	66	17.7%
8	859	422	218	51.7%	126	29.9%	78	18.5%
9	938	465	222	47.7%	155	33.3%	88	18.9%
10	971	441	208	47.2%	157	35.6%	76	17.2%

Table 4-24: Analysis of Completed Surveys by Mode and Market Profile for LFCHs

Market Profile	Total Sample	Completed Surveys	Mail Completes	Percent Completes from Mail	Web Completes	Percent Completes from Web	Phone Completes	Percent Completes from Phone
Overall	8,009	2,949	2,073	70.3%	460	15.6%	416	14.1%
2	904	355	261	73.5%	43	12.1%	51	14.4%
3	873	334	228	68.3%	52	15.6%	54	16.2%
4	799	311	232	74.6%	38	12.2%	41	13.2%
5	980	350	253	72.3%	52	14.9%	45	12.9%
6	844	309	209	67.6%	49	15.9%	51	16.5%
7	874	312	229	73.4%	44	14.1%	39	12.5%
8	813	314	221	70.4%	52	16.6%	41	13.1%
9	879	296	202	68.2%	55	18.6%	39	13.2%
10	1,043	368	238	64.7%	75	20.4%	55	14.9%

As was the case in 2016, the implementation of the web mode in 2018 was successful. For LCCs, 34% completed in 2018, compared to 23% completing in 2016. The percentage of LFCHs completing by web almost doubled in 2018, from 8.4% in 2016 to 15.6%.

D. Problems, Solutions, and Recommendations

For future survey iterations, ICF makes the following recommendations.

Revised data collection protocol: Like the two previous iterations, the response rate for the 2018 Market Rate Survey was markedly improved from previous iterations, suggesting that the additional web option and redesigned survey are having a positive impact. Interestingly, the 2018 cycle saw the lowest amount of participation via telephone. Revising the data collection protocol to further promote completion of the survey via web and reduce utilization of telephone could lower the cost of the survey administration—without negatively impacting the response rate.

Understanding the questionnaire: Our review of recorded interviews showed that some respondents had trouble understanding some of the questions that involved considering a subset of enrolled children, or cataloguing the number of hours that the children attended the center/home.

For example, several providers experienced challenges responding to the PREC1-PREC4 series which asked providers for the number of "parent pay all" children in different age categories and hour ranges.

Specifically, respondents believed that they were supposed to report *hours* instead of the number of children. We suggest revising the question series to follow a "gateway" model, which will also serve to remind the respondent that we are looking for number of children.

Suggested revision for next iteration:

> **C_INTRO:** We would like to know how much time these **"parent pay all"** children spend in your care. We are going to ask you about different age groups of children. For each age group, please tell me the number of **"parent pay all"** children you provided care to **last week.** Please do not count any of your own children, and do not count any children that do not pay the full fee.
>
> **NEWQ:** How many infants (ages 0 through 2 or 24 months) did your center care for last week? [*If 0, skip to PREC3.*]
>
> **PREC1**: I will now read a range of hours. For each range of hours, please tell me how many of these [*insert number provided in NEWQ*] infants were "parent pay all" infants.
>
> [Interviewer note: "By infants I mean any children from age 0 to 2 years old (24 months)."]

Interviewer Training:

- The interviewer training should provide context to interviewers and explain in detail what information we are seeking to obtain.
- Interview recordings revealed that several respondents indicate that they had not completed the mail/web survey yet because they were having trouble understanding the questions. New questions should be cognitively tested to verify understanding of the question intent.

Cognitive Testing:

- The Market Rate Survey has not been thoroughly cognitively tested for some time. In 2014, the mail survey was redesigned, and some questions altered to fit the new format. In addition, every cycle the survey is pre-tested to assess for any operational issues (e.g., survey platform correctly loading telephone numbers) in administration. However, a review of the entire instrument to test for understanding of questionnaire content has not been conducted since pre-2010. For the next cycle, we strongly urge CDE to consider including in the scope of work time to cognitively test the survey with a sample of providers. In doing so, we would highly encourage CDE to consider allowing incentives to be paid to those providers who agree to participate in the cognitive testing, as the time commitment can be substantial (one to two hours).

LICENSED CHILD CARE CENTERS AND HOMES ESTIMATES BY COUNTY

Reimbursement ceilings by county for LCCs and LFCHs for the 85th, 75th and 50th percentiles, as well as the mean for three different age groups (i.e., infant, pre-school, and school-age) and the following time categories—hourly (H), daily (D), full-time weekly (F/W), full-time monthly (F/M), part-time weekly (P/W), and part-time monthly (P/M) can be found in the accompany excel spreadsheet.

In the succeeding chapter, ICF presents the same information for each Market Profile, as well as a description of the socioeconomic characteristics of that profile. A complete description of how the Market Profiles were developed and how the estimates were computed for each county can be found in *Section 3. Methodology and Survey* Outcomes.

Because profiles were assigned based on ZIP codes, parts of counties are often assigned to different profiles. Therefore, there is no one-to-one match between counties and profiles, and a single county can have many Market Profiles assigned to it.

ESTIMATES BY MARKET PROFILE

This chapter presents (by Market Profile) the reimbursement ceiling estimates for LCCs for the 90th, 85th and 50th percentiles, as well as mean for three different age groups (i.e., infant, pre-school, and school-age) and the following time categories: hourly, daily, part-time weekly, part-time monthly, full-time weekly, and full-time monthly.

As discussed in *Section 3. Methodology and Survey Outcomes*, the 2018 Market Profiles were developed based on a regression model predicting child care rates from socioeconomic variables. This analysis was conducted at the ZIP code level using LCC and LFCH child care rates from the 2014 and 2016 surveys. Over 500 socioeconomic factors calculated from the 2012–2016 American Community Survey were evaluated as predictors of child care rates. The final set of variables was selected through a correlation analysis. The final variables selected for the model included:

- Percentage rural population
- Median Home Value (10,000s)
- Percentage of 1-unit, detached housing structures
- Percentage of owner-occupied units valued between $50,000 to $99,999
- Vacancy rate
- Percentage of 16+ population in civilian labor force
- Percentage of workers driving to work alone (car, truck, van)
- Percentage of families in poverty with female householder, no husband present - With related children under 18 years
- Percentage of 16+ population in civilian labor force working in government
- Percent of households with household income between $35,000 to $49,999
- Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations
- Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage
- Percentage of 18+ bachelor's degree or higher
- Percentage of population (3+) enrolled in college or graduate school

Using the model, ZIP codes were classified into deciles based on the predicted child care rates: 1 = lowest 10% (lowest predicted rates), 2 = second 10%, …, and 10 = highest 10% (highest predicted values). We collapsed the first two deciles due to a low number of providers in these ZIP codes. This resulted in nine Market Profiles for 2018.

Each section begins with a summary of the key socioeconomic and demographic variables describing that Market Profile. The 2018 child care estimates for LCCs and LFCHs are available separately in an accompanying dataset.

MARKET PROFILE 2 (2ND DECILE)

Definition: Low socioeconomic status (SES), low minority/foreign-born

Table 6-1: Characteristics of Market Profile 2

ZIP Code Characteristic	Mean Value
Percentage rural population*	62.4
Median Home Value (10,000s)*	22.8
Percentage of 1-unit, detached housing structures*	76.7
Percentage of owner-occupied units valued between $50,000 to $99,999	12.3
Vacancy rate	20.7
Percentage of 16+ population in civilian labor force*	53.4
Percentage of workers driving to work alone (car, truck, van)*	76.3
Percentage of families in poverty with female householder, no husband present - With related children under 18 years	48.3
Percentage of 16+ population in civilian labor force working in government	17.6
Percent of households with household income between $35,000 to $49,999	14.8
Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations	19.5
Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage	81.5
Percentage of 18+ bachelor's degree or higher*	16.7
Percentage of population (3+) enrolled in college or graduate school*	20.9

MARKET PROFILE: 3 (3RD DECILE)

Definition: Low SES, high minority/foreign-born

Table 6-2: Characteristics of Market Profile 3

ZIP Code Characteristic	Mean Value
Percentage rural population*	37.0
Median Home Value (10,000s)*	22.4
Percentage of 1-unit, detached housing structures*	72.2
Percentage of owner-occupied units valued between $50,000 to $99,999	11.1
Vacancy rate	15.9
Percentage of 16+ population in civilian labor force*	54.6
Percentage of workers driving to work alone (car, truck, van)*	74.6
Percentage of families in poverty with female householder, no husband present - With related children under 18 years	44.5
Percentage of 16+ population in civilian labor force working in government	17.8
Percent of households with household income between $35,000 to $49,999	14.9
Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations	16.7
Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage	78.6
Percentage of 18+ bachelor's degree or higher*	15.2
Percentage of population (3+) enrolled in college or graduate school*	21.7

MARKET PROFILE: 4 (4TH DECILE)

Definition: Mid-high SES, mid minority/foreign-born

Table 6-3: Characteristics of Market Profile 4

ZIP Code Characteristic	Mean Value
Percentage rural population*	33.2
Median Home Value (10,000s)*	26.6
Percentage of 1-unit, detached housing structures*	71.1
Percentage of owner-occupied units valued between $50,000 to $99,999	8.2
Vacancy rate	13.2
Percentage of 16+ population in civilian labor force*	56.9
Percentage of workers driving to work alone (car, truck, van)*	74.1
Percentage of families in poverty with female householder, no husband present - With related children under 18 years	40.5
Percentage of 16+ population in civilian labor force working in government	16.1
Percent of households with household income between $35,000 to $49,999	14.1
Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations	13.5
Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage	79.0
Percentage of 18+ bachelor's degree or higher*	19.1
Percentage of population (3+) enrolled in college or graduate school*	25.4

MARKET PROFILE: 5 (5TH DECILE)

Definition: Mid SES, high minority/foreign-born

Table 6-4: Characteristics of Market Profile 5

ZIP Code Characteristic	Mean Value
Percentage rural population*	28.2
Median Home Value (10,000s)*	32.0
Percentage of 1-unit, detached housing structures*	66.6
Percentage of owner-occupied units valued between $50,000 to $99,999	5.0
Vacancy rate	12.0
Percentage of 16+ population in civilian labor force*	58.7
Percentage of workers driving to work alone (car, truck, van)*	72.3
Percentage of families in poverty with female householder, no husband present - With related children under 18 years	34.9
Percentage of 16+ population in civilian labor force working in government	15.6
Percent of households with household income between $35,000 to $49,999	14.4
Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations	12.7
Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage	80.2
Percentage of 18+ bachelor's degree or higher*	21.3
Percentage of population (3+) enrolled in college or graduate school*	28.8

MARKET PROFILE: 6 (6TH DECILE)

Definition: Mid SES, mid minority/foreign-born

Table 6-5: Characteristics of Market Profile 6

ZIP Code Characteristic	Mean Value
Percentage rural population*	22.1
Median Home Value (10,000s)*	37.1
Percentage of 1-unit, detached housing structures*	65.9
Percentage of owner-occupied units valued between $50,000 to $99,999	4.6
Vacancy rate	9.2
Percentage of 16+ population in civilian labor force*	60.4
Percentage of workers driving to work alone (car, truck, van)*	74.7
Percentage of families in poverty with female householder, no husband present - With related children under 18 years	31.9
Percentage of 16+ population in civilian labor force working in government	15.8
Percent of households with household income between $35,000 to $49,999	12.2
Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations	11.4
Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage	81.0
Percentage of 18+ bachelor's degree or higher*	25.8
Percentage of population (3+) enrolled in college or graduate school*	30.7

MARKET PROFILE: 7 (7TH DECILE)

Definition: Mid-low SES, low minority/foreign born

Table 6-6: Characteristics of Market Profile 7

ZIP Code Characteristic	Mean Value
Percentage rural population*	14.1
Median Home Value (10,000s)*	44.2
Percentage of 1-unit, detached housing structures*	61.8
Percentage of owner-occupied units valued between $50,000 to $99,999	2.5
Vacancy rate	9.2
Percentage of 16+ population in civilian labor force*	62.6
Percentage of workers driving to work alone (car, truck, van)*	74.7
Percentage of families in poverty with female householder, no husband present - With related children under 18 years	28.1
Percentage of 16+ population in civilian labor force working in government	15.3
Percent of households with household income between $35,000 to $49,999	11.5
Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations	8.7
Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage	82.4
Percentage of 18+ bachelor's degree or higher*	33.2
Percentage of population (3+) enrolled in college or graduate school*	31.9

MARKET PROFILE: 8 (8TH DECILE)

Definition: High SES, low minority/foreign-born

Table 6-7: Characteristics of Market Profile 8

ZIP Code Characteristic	Mean Value
Percentage rural population*	8.4
Median Home Value (10,000s)*	56.1
Percentage of 1-unit, detached housing structures*	59.9
Percentage of owner-occupied units valued between $50,000 to $99,999	2.6
Vacancy rate	8.4
Percentage of 16+ population in civilian labor force*	64.6
Percentage of workers driving to work alone (car, truck, van)*	72.8
Percentage of families in poverty with female householder, no husband present - With related children under 18 years	27.8
Percentage of 16+ population in civilian labor force working in government	13.6
Percent of households with household income between $35,000 to $49,999	10.3
Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations	7.5
Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage	84.2
Percentage of 18+ bachelor's degree or higher*	39.5
Percentage of population (3+) enrolled in college or graduate school*	34.6

MARKET PROFILE: 9 (9TH DECILE)

Definition: High SES, low minority/foreign-born

Table 6-8: Characteristics of Market Profile 9

ZIP Code Characteristic	Mean Value
Percentage rural population*	9.1
Median Home Value (10,000s)*	70.2
Percentage of 1-unit, detached housing structures*	53.2
Percentage of owner-occupied units valued between $50,000 to $99,999	1.9
Vacancy rate	7.8
Percentage of 16+ population in civilian labor force*	65.0
Percentage of workers driving to work alone (car, truck, van)*	70.2
Percentage of families in poverty with female householder, no husband present - With related children under 18 years	25.5
Percentage of 16+ population in civilian labor force working in government	12.8
Percent of households with household income between $35,000 to $49,999	8.8
Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations	5.2
Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage	86.6
Percentage of 18+ bachelor's degree or higher*	50.1
Percentage of population (3+) enrolled in college or graduate school*	36.0

MARKET PROFILE: 10 (10TH DECILE)

Definition: High SES, low minority/foreign-born

Table 6-9: Characteristics of Market Profile 10

ZIP Code Characteristic	Mean Value
Percentage rural population*	4.0
Median Home Value (10,000s)*	99.5
Percentage of 1-unit, detached housing structures*	46.4
Percentage of owner-occupied units valued between $50,000 to $99,999	1.0
Vacancy rate	8.9
Percentage of 16+ population in civilian labor force*	66.3
Percentage of workers driving to work alone (car, truck, van)*	62.4
Percentage of families in poverty with female householder, no husband present - With related children under 18 years	20.2
Percentage of 16+ population in civilian labor force working in government	10.9
Percent of households with household income between $35,000 to $49,999	7.5
Percentage of 16+ population in civilian labor force occupied in natural resources, construction, and maintenance occupations	2.9
Percentage of civilian noninstitutionalized population 18 to 64 years, not in labor force with health insurance coverage	90.4
Percentage of 18+ bachelor's degree or higher*	64.7
Percentage of population (3+) enrolled in college or graduate school*	36.2

APPENDIX A: SAMPLED RECORDS AND COMPLETED INTERVIEWS BY COUNTY

The following tables present the number of providers that were contained in the original sample frame ("number in frame"), those sampled to be contacted for the survey ("number sampled"), and the number that completed the survey, either by mail or by phone ("completed interviews").

CENTERS

County Number	County Name	Number in Frame	Number Sampled	Completed Interviews
1	ALAMEDA	525	339	146
2	ALPINE	2	2	1
3	AMADOR	15	13	4
4	BUTTE	63	52	32
5	CALAVERAS	18	18	9
6	COLUSA	5	4	2
7	CONTRA COSTA	296	193	92
8	DEL NORTE	6	5	3
9	EL DORADO	56	40	15
10	FRESNO	253	211	106
11	GLENN	10	9	4
12	HUMBOLDT	43	36	20
13	IMPERIAL	35	29	13
14	INYO	10	9	5
15	KERN	130	111	56
16	KINGS	41	34	11
17	LAKE	15	13	8
18	LASSEN	8	6	4
19	LOS ANGELES	2574	1733	798
20	MADERA	33	31	12
21	MARIN	137	86	45
22	MARIPOSA	6	6	1
23	MENDOCINO	38	26	18
24	MERCED	63	59	30
25	MODOC	6	5	1
26	MONO	6	6	2
27	MONTEREY	115	86	34

County Number	County Name	Number in Frame	Number Sampled	Completed Interviews
28	NAPA	53	36	20
29	NEVADA	34	26	11
30	ORANGE	867	542	221
31	PLACER	104	78	38
32	PLUMAS	9	7	5
33	RIVERSIDE	296	232	136
34	SACRAMENTO	530	360	132
35	SAN BENITO	16	12	9
36	SAN BERNARDIN	407	305	109
37	SAN DIEGO	608	392	157
38	SAN FRANCISCO	323	195	86
39	SAN JOAQUIN	163	127	54
40	SAN LUIS OBIS	108	77	44
41	SAN MATEO	265	163	87
42	SANTA BARBARA	171	113	64
43	SANTA CLARA	542	358	173
44	SANTA CRUZ	107	71	34
45	SHASTA	57	49	31
46	SIERRA	1	1	1
47	SISKIYOU	20	17	10
48	SOLANO	58	38	17
49	SONOMA	132	87	45
50	STANISLAUS	104	94	60
51	SUTTER	33	26	6
52	TEHAMA	19	18	8
53	TRINITY	3	2	1
54	TULARE	83	72	38
55	TUOLUMNE	18	15	8
56	VENTURA	240	151	70
57	YOLO	77	50	24
58	YUBA	17	14	4
TOTAL	N/A	9,974	6,890	3,175

HOMES

County Number	County Name	Number in Frame	Number Sampled	Completed Interviews
1	ALAMEDA	1419	458	149
2	ALPINE	0	0	0
3	AMADOR	32	12	9
4	BUTTE	125	38	15
5	CALAVERAS	32	26	13
6	COLUSA	45	20	6
7	CONTRA COSTA	945	284	103
8	DEL NORTE	44	9	3
9	EL DORADO	90	30	13
10	FRESNO	576	193	89
11	GLENN	39	18	15
12	HUMBOLDT	116	29	19
13	IMPERIAL	270	77	42
14	INYO	22	9	5
15	KERN	646	256	90
16	KINGS	160	53	12
17	LAKE	57	29	15
18	LASSEN	14	7	3
19	LOS ANGELES	5761	1467	497
20	MADERA	142	99	26
21	MARIN	163	68	30
22	MARIPOSA	15	12	8
23	MENDOCINO	77	20	10
24	MERCED	205	82	36
25	MODOC	14	13	5
26	MONO	12	4	2
27	MONTEREY	359	91	41
28	NAPA	79	19	12
29	NEVADA	64	21	9
30	ORANGE	1115	300	138
31	PLACER	306	74	29
32	PLUMAS	25	13	5
33	RIVERSIDE	1516	381	169

County Number	County Name	Number in Frame	Number Sampled	Completed Interviews
34	SACRAMENTO	1267	297	111
35	SAN BENITO	66	15	5
36	SAN BERNARDINO	1569	370	115
37	SAN DIEGO	3248	802	233
38	SAN FRANCISCO	723	295	91
39	SAN JOAQUIN	658	163	57
40	SAN LUIS OBISP	234	105	34
41	SAN MATEO	599	216	89
42	SANTA BARBARA	381	113	39
43	SANTA CLARA	1470	491	185
44	SANTA CRUZ	294	75	29
45	SHASTA	110	39	17
46	SIERRA	4	3	2
47	SISKIYOU	26	10	2
48	SOLANO	415	96	28
49	SONOMA	352	90	42
50	STANISLAUS	323	104	53
51	SUTTER	81	25	13
52	TEHAMA	47	21	9
53	TRINITY	11	9	5
54	TULARE	446	206	80
55	TUOLUMNE	31	11	3
56	VENTURA	580	164	66
57	YOLO	227	56	17
58	YUBA	63	21	6
TOTAL	N/A	27,710	8,009	2,949