

2018 TEXAS CHILD CARE MARKET RATE SURVEY



FINAL REPORT

Conducted for:
The Texas Workforce Commission

Texas Institute for Child & Family Wellbeing
School of Social Work
The University of Texas at Austin

 **The University of Texas at Austin**
**Texas Institute for
Child & Family Wellbeing**
School of Social Work

Ray Marshall Center for the Study of Human Resources
LBJ School of Public Affairs
The University of Texas at Austin

 **RMC** Ray Marshall Center
for the Study of Human Resources
TEXAS LBJ School
The University of Texas at Austin
Lyndon B. Johnson School of Public Affairs

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1. INTRODUCTION AND OVERVIEW

1.1 INTRODUCTION

The Texas Institute for Child and Family Wellbeing (TXICFW), in partnership with the Ray Marshall Center for the Study of Human Resources (RMC), has undertaken the 2018 Texas Child Care Market Rate Survey as contracted by the Texas Workforce Commission (TWC) via Purchase Order number 320AD 18-0000591.

This report summarizes child care market rate data for the entire state of Texas and for each of its 28 local workforce development areas (LWDAs). For the first time in this 2018 report, market rates for child care are estimated using a combination of survey data and TWC administrative records data on approved child care subsidy rates. Three types of child care facilities were surveyed between October 2017 and May 2018: licensed child care centers, registered homes and licensed homes. In the survey, licensed and registered homes are grouped together, but separated for analysis. Table 1.1 below details the sample for the survey.

Table 1.1.1 Overview of Sample and Response Rate by Child Care Facility Type

Facility Type	Total Sampled	Total Eligible	Total Respondents	Response Rate*
Licensed Child Care Centers	2122	1881	1378	73.3%
Licensed and Registered Homes	1935	1650	713	43.2%
Total	4057	3531	2091	59.2%

*Response rate is calculated by taking the number of respondents who completed the survey and dividing it by the number of facilities determined to be eligible to take the survey.

Also new for 2018, the Texas Child Care Market Rate Survey report has been broken out into two reports. The main report, this document, is more compact than in earlier years. It contains all narrative descriptions of the survey and methods, statewide estimates of all findings, and the technical appendices. The second, supplemental report, contains almost a hundred pages of tables that include all findings broken out by local board, tables that had previously been included in the main report. The supplemental report is also available in spreadsheet form. It is hoped that this new two-report format will allow easier reading and comprehension of statewide trends and observations, while perhaps saving some paper and printing costs for those who may not need detailed statistics for all local areas.

The main report includes four sections, followed by several technical appendices. The first section, this introduction, briefly describes the research methods used for this survey and provides an analytic overview of key findings.

The second section of the main report consists of statistics describing the distributions of statewide daily market rates for child care. In addition to the mean daily rates, the following percentiles are provided: 30th, 40th, 50th (median), 60th, 70th, and 75th. Other components that were previously

included in this section of the report have been moved to the supplemental report. These include 1) daily market rates for child care presented for each LWDA by: type of facility, age group, and full-day vs. part-day status; 2) tables for each LWDA including a summary of rate data by age group (collapsed across facility types); and 3) tables for each LWDA summarizing rate data by facility type (collapsed across age groups).

The third section of the main report consists of a percentile analysis that compares data on local areas' maximum allowable reimbursement rates with actual market rate distributions. This analysis is intended to measure the degree of 'access' to the local market that a hypothetical customer would have with a maximum reimbursement rate subsidy in hand. General trends and patterns in the statewide level of access are included in the main report, as well as one table summarizing global access at the local level. These percentile analyses are presented in two groups: one for regular maximum reimbursement rates, and another for maximum 'enhanced' reimbursement rates that may be available to certain providers, depending on local rules. All detailed percentiles analysis has been moved to the supplemental report, including a presentation of maximum allowable reimbursement rates by LWDA by type of facility, age group, and part- or full-day care, followed by an analysis of the percentiles at which such rates will allow reimbursement.

The fourth section of the main report contains two statewide tables describing facilities that responded to the survey, but not including those facilities that only contributed data on subsidized rates via administrative records. One table reports the percentages of respondents offering care at non-traditional hours, transportation services offered, percentages of facilities with national accreditation and Texas Rising Star status, and two similar but distinct measures of the percentage of facilities serving any subsidized children, and the proportion of the enrolled children receiving a child care subsidy. The second table includes percentages of non-sectarian providers (non-profit and for-profit), sectarian providers (non-profit and for-profit), and community-based organizations (non-profit and for-profit). Detailed versions of these tables presenting the same measures by LWDA have been moved to the supplemental report.

1.2 OVERVIEW OF STUDY DESIGN

This discussion of the study design briefly describes the sampling technique, the interview process, and the analysis for the 2018 Child Care Market Rate Survey. A more detailed technical description of the analytic approach for the project, including new methods incorporating administrative records data on subsidized rates, is supplied in Appendix A. This section concludes with a brief analysis of trends by comparing results of this market rate survey to those of the prior year's survey, which was based on 2016-2017 data and completed in early 2017.

Sample of Child Care Facilities

The population of interest in this study is the priced child care market in Texas. Licensed and registered facilities that charge families directly and do not discount rates based on prior relationships with families are included in this study to determine child care market rates. Starting with the 2018 report, subsidized rates are now included by incorporating administrative records data, with careful attention paid to weighting schemes to ensure that subsidized rates carry only as much weight in the final analysis as the share of child care they actually represent. The 2018 study survey sample was drawn from a list of all 15,258 licensed and registered child care facilities provided by the Texas Department of Family and Protective Services (TDFPS) on September 8th, 2017. The list included three types of child care facilities in each of the 28 local workforce development areas (LWDAs):

- Licensed Child Care Centers (LCCCs)
- Licensed Child Care Homes (LCCHs)
- Registered Child Care Homes (RCCHs)

Head Start facilities were removed from the list prior to sampling because they do not charge families directly. Next, a small statewide representative sample of 1,000 facilities was randomly selected in order to 1) provide greater statistical power for estimating statewide rates and trends and 2) increase the precision of rate estimates for the largest local boards that provide the bulk of care in the state. A second random sample was drawn from the remaining facilities to estimate rates at the LWDA level. For this latter sample, we chose a target number of centers and a separate target for homes from every LWDA based on projections of the number needed to yield an average of 50 independent rate observations in center and home full-day rate categories.¹ Projections based on detailed response rates to the last three annual surveys indicated that, on average, 102 LCCCs, 17 LCCHs, and 82 RCCHs per LWDA were needed to reach this goal. These target numbers were then increased by between 1 percent and 10 percent for LWDA and facility type combinations that showed low response rates in recent surveys. The target

¹ This target of 50 independent rate observations is an increase over the 35 used in prior years. Some of this added precision is offset by under-sampling of subsidized facilities described below.

number of facilities was then randomly selected from each LWDA, or if fewer providers were available in any given combination of LWDA and facility type, the entire population was selected (a complete census). Implementation of this sampling scheme resulted in all facilities of any type being selected from seven LWDAs: 1, 7, 9, 12, 17, 25, and 27. In addition to these seven, a complete census of LCCCs was necessary in four more LWDAs, a complete census of LCCHs was necessary in two more LWDAs, and a complete census of RCCHs was necessary in thirteen more LWDAs.

Before the survey sample was finalized, a match was performed between the list of sampled facilities and a database indicating which facilities were serving subsidized children, whose rates were already known because they had been agreed upon. These partially subsidized facilities were randomly split into two groups, with one half being retained in the sample and the other half set aside to be excluded from further study. The net effect of these two changes, including the increased target described above and the removal of half of the subsidized facilities, was a nine percent reduction in the total survey sample, compared to prior years, but the resulting survey sample itself is more heavily inclusive of non-subsidized facilities. Another way of describing this is as an under-sample of subsidized facilities, whose rate data are largely redundant with existing data sources, and a corresponding over-sample of non-subsidized facilities, whose rates constitute the bulk of the paid market and are not otherwise available without surveying. Despite the reduced overall sample size for the survey portion, both subsidized and non-subsidized rates are estimated with greater precision than in prior years' surveys.

Before final rates were estimated, data from the statewide sample were added to that from the local samples in their respective areas, as well as the subsidized rate data, and weighting schemes were applied as appropriate (see Appendix A). The number of rate observations collected by this design was more than adequate to provide stable rate estimates for all LWDAs, without needing to rely on rates from adjacent areas or any other kinds of estimates or approximations.

Data Collection

Detailed training and supervision was provided to research staff members on survey methodology, interviewing protocols, data entry and collection, and tracking procedures by advanced graduate students and the project manager.

Prior to interviews, the research staff mailed introductory letters to all facilities in the sample explaining the survey purpose, goals and objectives, confidentiality policies, and the voluntary nature of participation. Information was presented in both English and Spanish unless providers' surnames suggested they were of Vietnamese origin, in which case information was presented in both English and Vietnamese.

A seven-station call center at TXICFW operated Monday through Friday between 8:00 AM to 7:00 PM. Research staff members maintained a tracking database containing basic provider information

(facility name, LWDA, phone number, facility identification number) and call history (number of attempts, date and time of attempt, preferred calling times, appointments, call results, final status). A minimum of two morning and two afternoon/evening calls were made to contact each provider beginning in October 2017 and ending in May 2018. The research staff administered calls at least one week apart unless an appointment or preferred calling time was established with a provider. In these cases, the staff made up to three additional attempts to complete the survey.

In order to prevent any delay in data collection and increase participation, bilingual research staff members (five English/Spanish and one English/Vietnamese) conducted interviews with centers and homes. Two additional research staff member conducted interviews with all identified multi-site facilities. A website was also constructed to present further information about the survey to providers. Finally, a toll free number was available for providers to return missed calls, return a message, or ask further questions about the survey.

If research staff were unable to complete the survey after all attempts had been made to reach a provider, the facility was marked as 'overdialed' and no more attempts to contact that facility were made. In cases where the phone number provided was disconnected or no longer in service, the research staff attempted to contact the facility three times at least one week apart. If the number was still not working and no additional information was available online, the staff determined the facility to be ineligible.

During an interview, research staff members screened out facilities that did not represent the true price market for child care in Texas. These facilities include those that only offered drop-in care, part-day care with no after-school care, summer camps, care provided to specific populations only (i.e. children with special needs, children of teen moms, children of staff at a company, etc.), and free/family-discounted child care services. School and kindergarten programs that did not offer regular afterschool care and Head Start programs were also excluded. Finally, facilities that had closed or no longer had children enrolled were determined to be ineligible.

Final Call Disposition

A total of 4,057 child care facilities (2,122 centers and 1,935 homes) were included in the survey sample this year. Of these facilities, 526 (13.0%) did not meet study eligibility criteria and were dropped from the response rate calculations. For centers, the top reasons for not meeting eligibility criteria included:

- 1) No full-day, part-day, or after school care offered on a regular basis (25.3%);
- 2) Care to specific population only/not open to the public (19.9%);
- 3) Disconnected number or non-working number (15.8%).

For homes, top reasons for ineligibility included:

- 1) Disconnected number or non-working number (47.8%);
- 2) Closed or not providing care (34.0%);
- 3) Free/Family-discounted child care (13.3%).

Table 1.2.1 below details the eligibility of child care providers who were contacted.

Table 1.2.1 Eligibility Status of Child Care Facilities

	Homes		Centers		Total	
Not Eligible	285	14.7%	241	11.4%	526	13.0%
Eligible	1650	85.3%	1881	88.6%	3531	87.0%
Total	1935		2122		4057	

The number of eligible providers is used to calculate the overall response rate. Of the 3,531 eligible child care providers, 2,091 (59.2%) completed the survey. This overall response rate reflects the same pattern seen in previous years in which homes have lower response rates than centers. The overall response rate for homes was 43.2% and the overall response rate for centers was 73.3%. Table 1.2.2 below details the final call disposition of all eligible child care facilities.

Table 1.2.2 Final Call Disposition of Eligible Child Care Facilities

	Homes		Centers		Total	
Completed	713	43.2%	1378	73.3%	2091	59.2%
Refused	83	5.0%	30	1.6%	113	3.2%
Overdialed	820	49.7%	456	24.2%	1276	36.1%
Withdrew	13	0.8%	6	0.3%	19	0.5%
Partial	21	1.3%	11	0.6%	32	0.9%
Total	1650		1881		3531	

While these response rates are a few percentage points below those attained in recent years, at least three factors that are known to depress response rates are likely responsible. For one, the survey design under-sampled subsidized facilities, leaving fewer of them in the final sample, yet subsidized facilities are known to respond at higher rates (see Appendix A, response bias analysis). A second factor is that maximum reimbursement rates had been frozen throughout the survey period, a practice that has been associated with reduced response rates in earlier years of this survey. Finally, just before the survey was fielded, hurricane Harvey caused widespread destruction and disruption for a large portion of the state. Despite our attempts to ameliorate the effects of this by delaying the survey by a few months for disaster-affected counties, we ultimately observed almost a four percentage point reduction in response rates in these counties (see Appendix A, disaster counties).

HOMES: Both licensed and registered homes were combined into a single sample of 1,935 homes. Of these homes, 1,650 were determined to be eligible. A total of 713 (43.2%) providers completed interviews, 83 (5.0%) refused to complete interviews, and 13 withdrew (0.8%). An additional 21 providers (1.3%) completed only a portion of the interview. Finally, 820 (49.7%) providers were overdialed.

CENTERS: A total of 2,122 centers were sampled. Of these centers, 1,881 were determined to be eligible. A total 1,378 (73.3%) providers completed interviews, 30 (1.6%) refused to complete interviews, and six withdrew (0.3%). An additional 11 providers (0.6%) completed only a portion of the interview. Finally, 456 (24.2%) providers were overdialed.

Measures

The Market Rate Surveys for home-based and center-based facilities covered similar topics. However, home-based facilities provided detailed information concerning each child under their care (age, exact schedule of care, and rate charged), whereas center-based facilities provided rates by age group and by whether care was full-day or part-day (less than six hours per day). See Table 1.2.3 for a summary of information collected on home-based and center-based surveys.

Table 1.2.3 Summary of Survey Data Collected by Facility Type

Topics	Home-Based Survey	Center-Based Survey
Hours of Operation	Yes	Yes
Vacation Schedules	Yes	Yes
Child Age and Enrollment	Individual age and schedule for each child in care	*Facility-determined age groups and enrollment by age group
Rates	Rate Type (CCS/Non-CCS) and individual rate charged per child	Full-day and part-day rates by age group
Additional Fees		
Registration	Yes	Yes
Enrollment		
Activity		
Administrative Categories		
Non-profit/for-profit	Yes	Yes
Associations		
Transportation		
National Accreditations	Yes	Yes
Texas Rising Star Program	Yes	Yes

*Center rate data were gathered for children in various age groups, using the facility-determined age group cutoffs to set rates. These data were then collapsed into the following standard age groups for reporting: Infants (0-17 months); toddlers (18-35 months); preschoolers (36-71 months); and school age children (72 months and over).

The 2018 surveys were modified slightly from previous years to include two additional items. The first item followed up with providers who did not accept CCS children to better understand their reasons for this decision. Initially, interviewers marked one of five categories based on their response:

- Reimbursement rates too low;
- Attendance reporting requirements;
- Provider did not know about CCS subsidies;
- Other reason (explain _____); or
- No reason provided.

After one month, all open-ended responses were analyzed and recoded. The research team categorized all other responses and came up with the finalized question:

Is there a reason you do not accept CCS children?

- Not currently caring for CCS children but do accept
- No CSS- In process of setting up
- Families have not requested or needed
- Paperwork/reporting requirements
- Reimbursement rates too low
- Not receiving/receiving late parent co-pays
- Not receiving/receiving late CCS payments
- Facility is full/fills too quickly
- Facility is new/too small
- Need more information/training
- Not set up: No reason provided
- Owner's decision: No reason provided

The second question added asked providers who did accept CCS children, “Do you charge families an additional amount if their total CCS subsidy plus parent copay is less than your established rate?”

Analytic Approach

The technical appendix provides a detailed account of the analytic approach taken in producing the rates in this report, including the addition of subsidy rates from administrative records. Virtually all of the daily market rate percentiles and other statistics presented in this report are based on large and statistically reliable sample sizes. Even in the scarcest categories of care, such as part-day infant and toddler care in homes, the numbers of rates gathered were sufficient for estimating stable rates.

Because different types of facilities tend to set their rates differently, analysis of center rates was based on the rates for a category of care (for example, full-day care for toddlers), while the rates for home-based care (LCCH and RCCH) were determined by the amounts charged for individual children. That is, as mentioned earlier, in interviews with centers the researchers asked for the rates charged for a particular age group following a particular schedule. In contrast, researchers asked home-based facilities for the age and rate charged for each individual child.

After the survey data were collected, all rates that appeared extremely high or low (known as outliers) were identified, and researchers individually checked each rate report and corrected any errors they found. Subsequent to these corrections, a small portion of the most extreme outliers remaining in the sample were corrected to remove their excessive influence on statistical measures of the rates distributions. In addition, similar procedures were implemented to detect instances in which the number of slots reported for a given rate was too extreme, whether too high or too low, and to correct these extremes to more reasonable values. In general, as one might expect in a large and diverse state, extreme rates, whether at the low or high end of the scale, were typically the result of unusual services provided by an individual facility and/or variations in subsidies and financing rather than research error.

1.3 ANALYSIS AND TRENDS

The basic outcomes for this report are presented in two sections: the first provides the child care rates; the second describes the prevalence of services and financial and organizational arrangements among child care facilities. Several interesting trends emerge from this analysis.

The data and analysis in this main report and the supplemental report are voluminous. The primary tables of daily child care market rates give seven statistics for each of four age groups in each of two schedule types (part-day and full-day) in three types of facilities for each of the 28 LWDA Boards. These data yield a total of 4704 statistics. It is likely that in such a massive report, some anomalies will emerge in the numbers. A systematic analysis was done of all possible comparisons looking for common rate anomalies, such as when an older child rate significantly exceeds the corresponding rate for a younger child, or a part-day rate exceeds the corresponding full-day rate. None of these types of anomalies were found to be present in the data.

Market Rates and Other Statistical Descriptions

A direct comparison of the daily market rates reported in this 2018 survey to those observed in 2017 reveal a number of interesting trends that are evident on a statewide level.² In prior years' surveys, these comparisons generally revealed only the impact of gradual price inflation on child care market rates. Due to significant methodological changes introduced for 2018, however, these comparisons likely reflect the combined influence of both price inflation and the new estimation methods. In particular, the incorporation of administrative data on subsidized rates into the estimation has changed the nature of the statistical distribution of child care rates. Generally speaking, subsidized rates tend to have less variation overall, and tend to cluster near or just below the median of market rates. Subsidized child care rates have always been a significant portion of the priced market in Texas in modern history, and thus of the rates measured by this survey, but the addition of subsidized rates through a new data source has led to greater numbers and far better coverage of this market segment. Thus, although the added subsidized rates were appropriately weighted in an attempt to reflect their true share of the market, including them in the estimation has apparently led to reductions in the estimated median rates. Interestingly, since the subsidized rates were rarely observed to be above the median, the effects of price inflation may still be deduced by observing patterns at the upper end of the distribution, at the 75th percentile, for example.

Overall, across facility types and age groups, estimated median daily rates were found to decrease by about 10.9 percent during this period, or about (\$2.19) per day, when compared to 2017 median daily rates. Since this observed decline is at least partially an artifact of the changing estimation method, we

² Comparisons were made of all 672 median rates (28 areas multiplied by 24 rate categories) reported in this survey versus the same rates from the prior annual survey, and are weighted to be representative of care provided on a statewide basis. Similar comparisons were also made at the 75th percentile.

also examined changes at the 75th percentile of rates, which showed that overall, rates increased by 5.3 percent, or \$1.26 per day. This rate of increase at the 75th percentile is toward the high end of increases seen in recent history, as rates are often found to increase from around two to five percent per year.

These trends in rates are the result of diverging patterns among different facility types:

In Licensed Child Care Centers, median rates decreased by an average of 5.9 percent, or about (\$1.26) per day. Rates at the 75th percentile in Centers were found to increase by 9.8 percent, or \$2.47 per day.

In Licensed Child Care Homes, median rates decreased by an average of 9.5 percent, or about (\$1.94) per day. Rates at the 75th percentile in Licensed Homes increased by 6.7 percent, or about \$1.62 per day.

In Registered Child Care Homes, estimated median rates decreased by an average of 14.8 percent, or about (\$2.83) per day. Rates at the 75th percentile in Registered Homes increased by 1.8 percent, or \$0.41 per day.

Changes in the market rates varied by age groups of the children served:

Median rates for infants were found to decrease by an average of 12.6 percent, or about (\$2.84) per day. At the 75th percentile, infant rates increased by 2.8 percent, or \$0.74 per day

Median rates for toddlers decreased by an average of 8.5 percent, or about (\$1.83) per day. Toddler rates at the 75th percentile increased by 7.2 percent, or \$1.82 per day.

Median rates for preschoolers decreased by an average of 9.2 percent, or about (\$1.74) per day. At the 75th percentile, preschooler rates increased by 7.6 percent, or about \$1.70 per day.

Median rates for school aged children decreased by an average of 13.8 percent, or about (\$2.34) per day. School aged rates at the 75th percentile were found to increase by 3.9 percent, or \$0.79 per day.

Rates for full-day and part-day care diverged:

Median full-day rates were observed to decrease by an average of 9 percent, or about (\$1.98) per day. At the 75th percentile, full-day rates increased by 6.6 percent, or about \$1.71 per day.

Median part-day rates decreased by an average of 13.3 percent, or about (\$2.40) per day. Part-day rates at the 75th percentile showed increases of 3.8 percent, or about \$0.82 per day.

Finally, comparing rates across regions, and continuing a trend seen in prior years, the Austin region (including Capital Area, LWDA 14; and Rural Capital, LWDA 15) has the most expensive child care in the state. Not far behind are the DFW area (including Tarrant County, LWDA 5, North Central Texas, LWDA 4, and Dallas, LWDA 6) as well as local boards covering most of the remaining large metro areas of the state, including Alamo (LWDA 20) and Gulf Coast (LWDA 28). The least expensive care in the state is along the Rio Grande River, including Middle Rio Grande (LWDA 27), Lower Rio Grande Valley (LWDA 23), Cameron County (LWDA 24), and Borderplex (LWDA 10), which includes El Paso.

Part Day Care Availability

Other trends noted in previous surveys were again evident in 2018. For a number of years now a short supply of part-day infant care, as well as part-day care in general, has been noted in most areas of the state.³ As an illustration of this finding, the following figures show percentages of facilities that offer part-day care for each of four age groups. These are shown for each of the last five annual market rate surveys.⁴

Figure 1.3.1 Share of Licensed Centers Offering Part-Day Care over Time

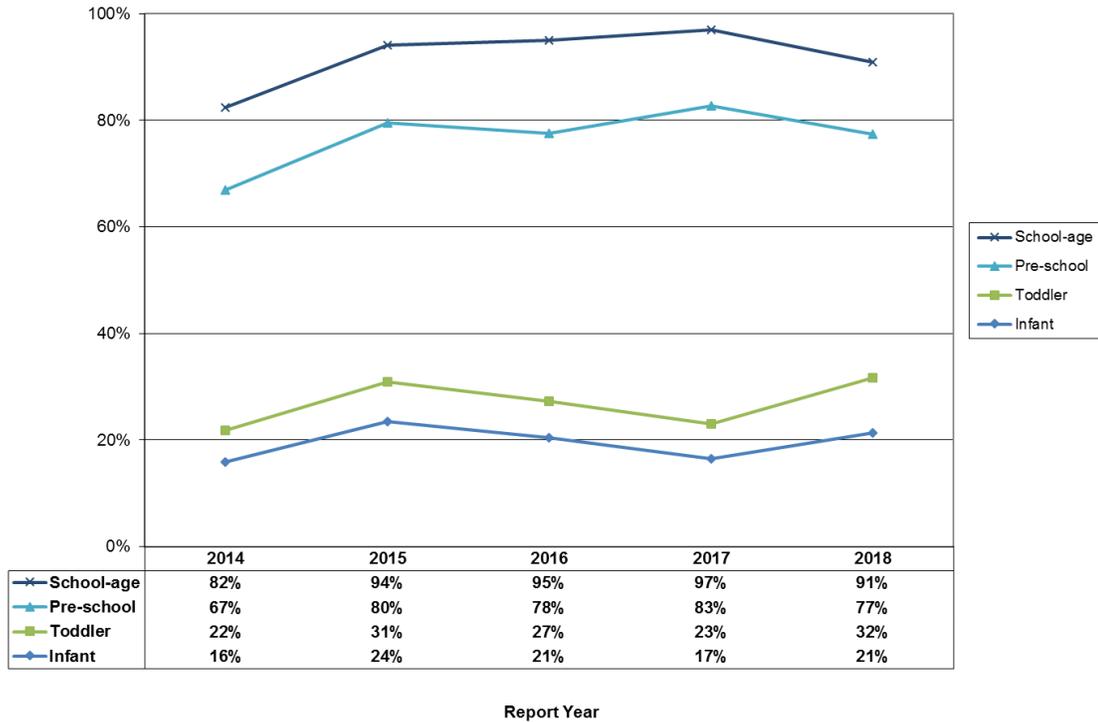


Figure 1.3.1 illustrates these trends for Licensed Centers. This figure makes it clear that part-day infant and toddler care are the most difficult to find. Furthermore, as will be seen below, these low rates of availability are the best the market offers to those needing part-day care, as availability among homes is worse. In contrast, the overwhelming majority of centers that serve older children, including preschool or school age, offer part-day care.

³ Part-day rates are considered care that is less than 6 hours per day. Part-day rates are not the same as part-time rates. For example, a child attending part-time may attend for two days a week for 8 hours a day, which would be considered a full-day rate.

⁴ The method of computing part-day care availability was changed for the 2018 report, and was applied to all years shown in chart. For each age group, the denominator is now the total number of facilities serving children of that age group. This change has the effect of clarifying the distinction between low availability of part-day infant care, for example, and low availability of infant care in general.

Figure 1.3.2 shows availability of part-day care over time for Licensed Homes. Part-day care for infants and toddlers in licensed homes is very scarce, offered by fewer than one in ten facilities that serve these younger children. Part-day care for preschoolers is slightly more available, but is still only offered by about one in five facilities serving this age group. Part-day for school age children appears to be readily available in licensed homes that serve this age group.

Figure 1.3.2 Share of Licensed Homes Offering Part-Day Care over Time

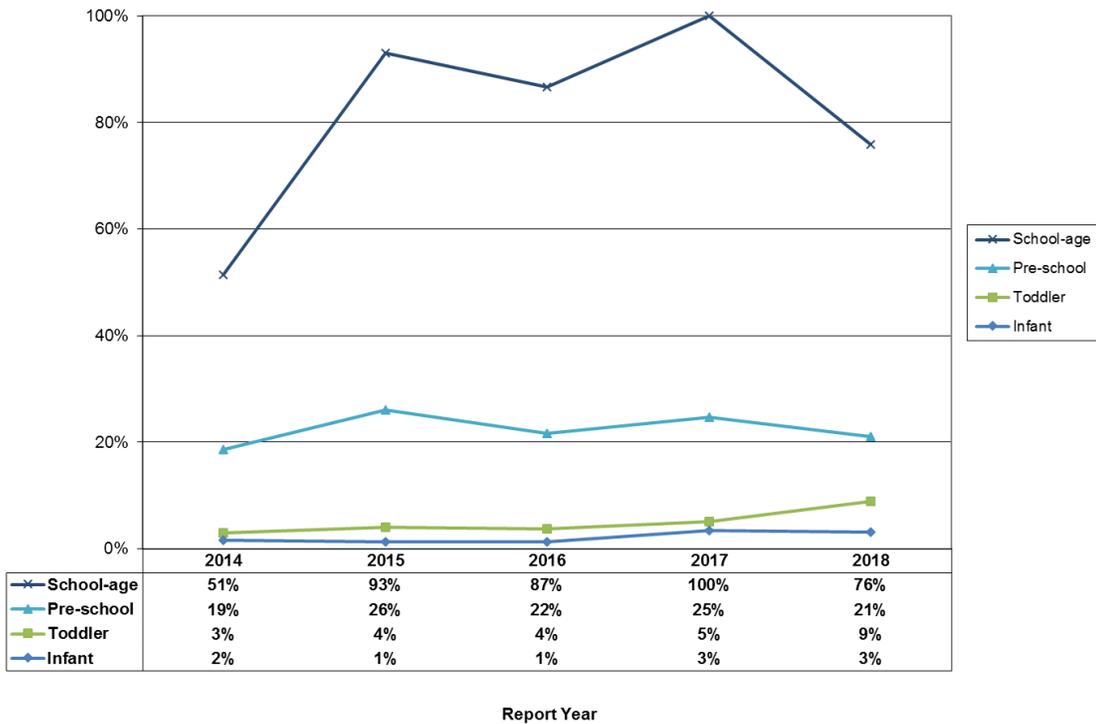
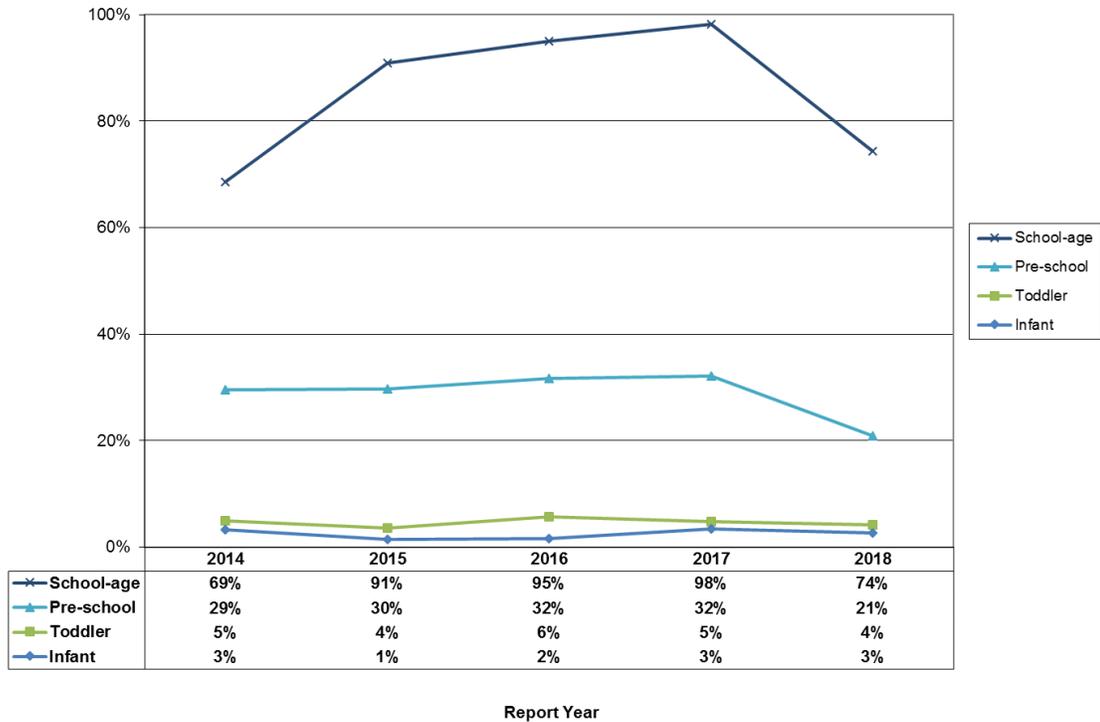


Figure 1.3.3 illustrates availability of part day care in registered homes, which is quite similar to the pattern of availability in licensed homes. That is, part-day care for infants and toddlers is very scarce in registered homes, while part-day availability is slightly better for preschoolers. In contrast, part-day care for school-age children is offered by the vast majority of registered homes that serve this age group.

Figure 1.3.3 Share of Registered Homes Offering Part-Day Care over Time



Quality Care Availability

In order to ensure that Texas families have and maintain access to quality child care, the following charts were created to show trends over time in two measures that address quality via the concept of accreditation. Providers who responded to the market rate survey were asked two questions related to their accreditation status. They were first asked if they had any national accreditations or certifications. They were then asked if they were a Texas Rising Star provider. Those providers who indicated that they were a Rising Star provider were further asked how many stars they had.

Figure 1.3.4 Illustrates trends in responses to these items among Licensed Centers. The bottom line, in blue, shows the share of centers reporting Rising Star status. The middle line, in red, shows the percentage of centers reporting national accreditation or certifications. And the top line, in yellow, shows the share of providers reporting either of these quality indicators. Regardless of which indicator one examines, the trend in recent years has been holding relatively constant to a slight decline over the last few years followed by an uptick in quality observed in 2018.

Figure 1.3.4 Share of Centers Reporting Accreditation over Time

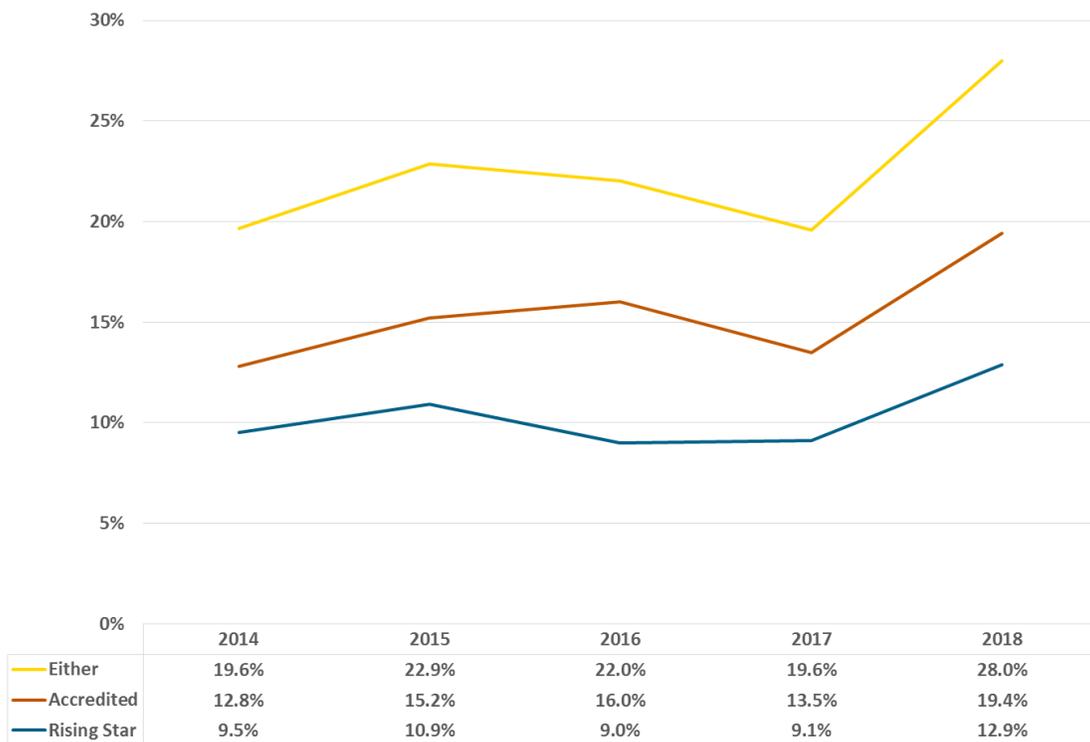
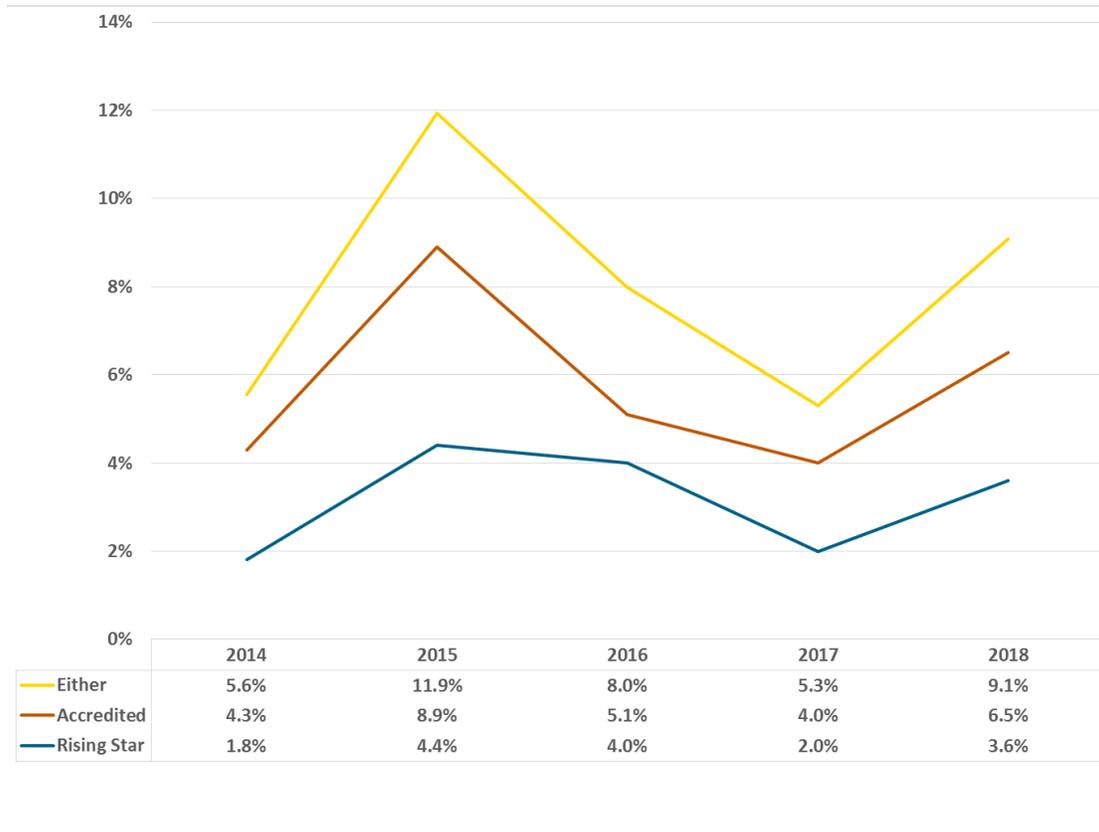


Figure 1.3.5 illustrates trends in responses to these accreditation items among licensed and registered homes. Among homes, the decline in quality over several years from a recent peak in 2015 is more pronounced than among centers. As was the case with centers, responses for 2018 indicate an increasing percentage of homes reporting accreditation of any kind in the latest survey.

Figure 1.3.5 Share of Homes Reporting Accreditation over Time



Quality Care Pricing

Critical to the question of availability of quality care is the related issue of how much higher quality child care costs. Although a detailed study of this issue would require extensive documentation of provider costs across multiple arenas, it is possible to get a reasonable approximation of the cost of providing accredited child care through statistical modeling of price data reported to the market rate survey. This section reports on the results of a series of statistical models designed to elucidate the cost of providing accredited child care.⁵

After accounting for the obvious features that drive child care prices, including age of the child, type of facility, and full or part day care, only a handful of predictors are left that still bear substantial influence on the rates charged by facilities for a day of child care. The two largest such factors include whether the facility in question serves subsidized children and whether they report some kind of accreditation. Furthermore, since these two factors are correlated, it is not possible to get a fair estimate of the cost of providing accredited care without simultaneously estimating the cost of providing subsidized care, and vice versa.

Table 1.3.1 Estimated Cost of Subsidy and Accreditation

Facility Type	Subsidy	Accredited
Centers	-\$6.31	\$8.58
Licensed Homes	-\$2.89	\$4.66
Registered Homes	-\$2.79	\$4.50

Table 1.3.1 shows the results of models that simultaneously estimate the daily added cost of accreditation and subsidy while controlling for age of child, facility type, and full or part day care. Although the models are moderately complex, the presentation here is simplified by focusing on the cost of providing one day of care to one full time preschooler.⁶ The first row of this table can be interpreted to mean a typical center that serves subsidized children charges \$6.31 per day less than a non-subsidized center, while an accredited center charges \$8.58 per day more than a non-accredited center to serve a full time preschooler. Among homes, these cost differentials are more muted. Both licensed and registered homes charge nearly \$3 per day less than other facilities if they serve subsidized children, and about \$4.50 more per day if they have national accreditation.

⁵ Statistical models described in this section are identical to those that underlie the distribution of rates described throughout this report, except for the addition of the quality and subsidy measures shown here. See Appendix A.

⁶ Full-time preschooler is the most common combination of care provided. Many additional parameters can be estimated from these models, not shown.

Table 1.3.2 Estimated Cost of Subsidy and Rising Star Status

Facility Type	Subsidy	Rising Star, any
Centers	-\$7.90	\$1.98
Licensed Homes	-\$3.05	\$0.52
Registered Homes	-\$2.91	\$0.50

Table 1.3.2 illustrates the results of similar models, except in this case the quality indicator is Texas Rising Star status. According to these models, centers that serve subsidized children charge \$7.90 per day less than non-subsidized centers, while centers with any number of stars in the Rising Star program charge \$1.98 per day more than centers with no stars.⁷ As before, homes that serve subsidized children tend to cost around \$3 per day less than those that do not, while homes with Rising Star status charge about \$0.50 per day more than those without such status.

Subsidy Acceptance and Pricing

In order to gain insight into the dynamics of which facilities accept subsidized children and how it affects their pricing for such children, two new questions were added to the survey for 2018. The first question is addressed to those who serve subsidized children. It asks such facilities whether they charge more to families of subsidized children if their established rates are greater than the reimbursement they would receive (which includes the subsidy plus copayment). As shown in Table 1.3.3, less than 5 percent of centers indicate that they charge such families an additional amount, while about 10 percent of homes charge a surcharge.

Table 1.3.3 Pricing for CCS Children

Do you charge families an additional amount if their total CCS subsidy plus parent copay is less than your established rate?	Centers	Homes
Yes	4.4%	10.2%

⁷ To the question why the Tables 1.3.1 and 1.3.2 provide different estimates of the cost of a day of subsidized care, the short answer follows. When you estimate the cost of subsidy while holding quality constant, the subsidy cost estimate depends on how good the quality measure is at capturing actual differences in quality. In this technical sense, accreditation is a better quality measure than Rising Star status, since Rising Star status is generally sought only by those serving subsidized children (they can get higher reimbursement), while accreditation is more broadly useful as a quality signifier regardless of whom a facility serves.

The second question is addressed to facilities that do not report serving subsidized children, and asked them whether they had a reason for not accepting subsidized children. Table 1.3.4 summarizes responses to this question as categorized by interviewers. The most common reason reported by homes is that families have not requested or needed subsidized care. Also commonly reported by homes is that they do accept subsidized children but do not currently provide care for any subsidized children at the time of their interview. Among center respondents, the most common answers are that they are not set up to accept subsidies, but no reason is provided, or that it was the owner’s decision, again with no reason provided. Centers not serving subsidized children also frequently claimed that the families they serve have not requested or needed subsidized care.

Interestingly, about five percent of facilities not serving subsidized children indicated they did not do so because reimbursement rates were too low. A similar percentage of facilities of either type felt they needed more information of training in order to accept subsidized children.

Table 1.3.4 Provider Reasons for not Accepting CCS Children

Categorized Response	Centers	Homes
Not currently caring for CCS children but do accept	0.5%	20.0%
In process of setting up	1.9%	0.5%
Families have not requested or needed	15.8%	45.8%
Paperwork/reporting requirements	9.0%	2.1%
Reimbursement rates too low	4.7%	5.0%
Not receiving/receiving late parent co-pays	0.3%	0.6%
Not receiving/receiving late CCS payments	0.8%	1.2%
Facility is full/fills too quickly	4.2%	1.6%
Facility is new/too small	3.5%	0.4%
Need more information/training	4.7%	5.9%
Not set up: No reason provided	30.7%	10.4%
Owner's decision: No reason provided	20.2%	8.0%
Other	11.7%	3.9%

2. CHILD CARE DAILY MARKET RATES – STATE OF TEXAS

Table 2.1 Texas Child Care Daily Market Rates — State of Texas

			Mean	30th percentile	40th percentile	Median	60th percentile	70th percentile	75th percentile
Licensed Child Care Centers	Infant	Full-day	\$35.95	\$30.29	\$33.69	\$37.30	\$43.81	\$46.88	\$49.00
		Part-day	\$24.35	\$19.78	\$22.00	\$23.19	\$26.78	\$32.63	\$34.79
	Toddler	Full-day	\$33.42	\$27.37	\$30.38	\$34.31	\$39.29	\$42.77	\$45.18
		Part-day	\$23.48	\$19.23	\$20.46	\$22.88	\$26.86	\$28.69	\$31.27
	Preschool	Full-day	\$30.91	\$26.00	\$29.19	\$32.74	\$36.05	\$39.88	\$41.45
		Part-day	\$19.25	\$15.67	\$17.26	\$19.13	\$21.16	\$22.88	\$24.28
	School age	Full-day	\$28.75	\$23.58	\$26.00	\$30.71	\$33.96	\$37.83	\$39.51
		Part-day	\$15.73	\$13.38	\$14.68	\$15.58	\$16.74	\$18.73	\$19.58
Licensed Child Care Homes	Infant	Full-day	\$25.94	\$23.71	\$25.38	\$28.85	\$30.22	\$30.22	\$32.00
		Part-day	\$28.45	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00	\$30.00
	Toddler	Full-day	\$24.61	\$20.56	\$22.69	\$25.00	\$27.00	\$30.00	\$31.00
		Part-day	\$25.81	\$20.00	\$25.10	\$27.50	\$29.00	\$35.00	\$35.00
	Preschool	Full-day	\$25.09	\$20.23	\$22.46	\$26.00	\$28.10	\$30.51	\$33.10
		Part-day	\$15.71	\$10.00	\$14.00	\$14.79	\$15.42	\$19.00	\$19.46
	School age	Full-day	\$15.94	\$14.00	\$15.10	\$15.10	\$20.00	\$22.46	\$22.46
		Part-day	\$11.75	\$10.00	\$10.00	\$12.00	\$13.00	\$15.00	\$15.00
Registered Child Care Homes	Infant	Full-day	\$26.82	\$23.00	\$26.00	\$28.00	\$30.06	\$33.01	\$34.62
		Part-day	\$27.37	\$25.13	\$30.17	\$30.17	\$33.67	\$33.67	\$33.67
	Toddler	Full-day	\$22.79	\$19.00	\$20.00	\$22.00	\$25.10	\$28.00	\$30.00
		Part-day	\$18.73	\$20.00	\$20.00	\$20.00	\$20.58	\$23.62	\$23.62
	Preschool	Full-day	\$21.84	\$18.00	\$20.00	\$20.10	\$24.46	\$26.12	\$28.00
		Part-day	\$13.11	\$10.10	\$13.00	\$13.88	\$15.00	\$15.00	\$15.10
	School age	Full-day	\$15.11	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00
		Part-day	\$12.69	\$10.00	\$10.00	\$12.69	\$14.29	\$15.00	\$17.00

Table 2.1.1 Child Care Daily Market Rates by Age Group — State of Texas

		Mean	30th percentile	40th percentile	Median	60th percentile	70th percentile	75th percentile
Infant	Full-day	\$35.22	\$29.48	\$33.00	\$35.99	\$41.88	\$46.18	\$48.17
	Part-day	\$24.42	\$19.78	\$22.14	\$23.80	\$27.12	\$32.60	\$34.39
Toddler	Full-day	\$32.35	\$26.86	\$29.27	\$33.00	\$37.86	\$41.67	\$43.90
	Part-day	\$23.45	\$19.23	\$20.46	\$22.88	\$26.80	\$28.67	\$31.14
Preschool	Full-day	\$30.70	\$25.97	\$28.72	\$32.33	\$35.59	\$39.62	\$41.42
	Part-day	\$19.17	\$15.48	\$17.26	\$19.00	\$21.16	\$22.88	\$24.28
School age	Full-day	\$28.08	\$22.46	\$25.29	\$29.40	\$33.38	\$37.38	\$39.29
	Part-day	\$15.66	\$13.28	\$14.66	\$15.57	\$16.65	\$18.67	\$19.58

Table 2.1.2 Child Care Daily Market Rates by Facility Type — State of Texas

		Mean	30th percentile	40th percentile	Median	60th percentile	70th percentile	75th percentile
Licensed Child Care Centers	Full-day	\$32.30	\$27.00	\$30.13	\$33.72	\$38.07	\$41.66	\$43.38
	Part-day	\$17.31	\$14.21	\$15.46	\$16.98	\$18.67	\$20.46	\$22.19
Licensed Child Care Homes	Full-day	\$24.38	\$20.23	\$22.46	\$25.00	\$27.36	\$30.10	\$31.00
	Part-day	\$15.32	\$10.00	\$13.00	\$14.10	\$15.19	\$19.63	\$20.89
Registered Child Care Homes	Full-day	\$23.22	\$19.94	\$20.00	\$24.00	\$26.00	\$29.38	\$30.00
	Part-day	\$13.36	\$10.00	\$12.00	\$13.10	\$15.00	\$16.00	\$19.00

**3. CHILD CARE DAILY MARKET RATES AND LWDA ESTABLISHED RATES:
PERCENTILE ANALYSIS**

Maximum reimbursement rates in effect for Local Workforce Development Areas (LWDAs) in April 2018⁸ for the various categories of child care were compared to the distributions of daily market rates gathered in this 2018 survey to determine at what percentile of the market such maximum rates would provide access. Similar comparisons were made for *maximum enhanced rates*, or the highest rate a local board will reimburse for care in facilities that, for example, receive more stars on the Texas Rising Star scale, or whatever other criteria are used locally to assign enhanced rates. Exact percentiles at which access is provided, whether for regular reimbursement or maximum enhanced rates, are listed for all categories of care in the tables below, as well as the more detailed tables in the supplemental report. Note, however, that these percentiles at which access to care is potentially available should not be confused with percentiles at which care is reimbursed.⁹

General trends in the level of access *potentially* provided are presented below. Overall, across care types, facility types, age groups, and local boards, maximum reimbursement rates were found to provide access to the 46th percentile of market rates, while maximum enhanced rates provide access to the 54th percentile.¹⁰

As shown in the following table, access is fairly uniform across facility types when examining maximum regular rates, ranging from the 44th to the 46th percentiles. Among maximum enhanced rates, access is slightly lower for licensed homes, at the 51st percentile, than for licensed centers or registered homes, for whom maximum enhanced rates allow access at the 54th and 53rd percentiles of the market.

Table 3.1.1 Percentile Analyses by Facility Type

Facility Type	Average maximum rate	Percentile of maximum rate	Average maximum enhanced rate	Percentile of maximum enhanced rate
Licensed Child Care Centers	\$21.57	46	\$24.05	54
Licensed Child Care Homes	\$19.00	44	\$21.04	51
Registered Child Care Homes	\$17.83	46	\$19.79	53

⁸ As of this writing, maximum reimbursement rates have been frozen since December 2016.

⁹ To estimate the percentile at which care is reimbursed, corrections would need to be made for reimbursement below the maximum, as well as differential weighting of more common and rarer forms of care.

¹⁰ Although these numbers seem to indicate greater market access than reported in recent surveys, direct comparisons to prior years are difficult due to the methodological changes in rate estimation implemented in 2018.

Part-day care and full-day care are potentially reimbursed at about the same percentiles, indicating roughly equal market access, as shown in the table below. It should be noted, however, that there is greater uncertainty surrounding market rates for part-day care. As shown previously, many facilities do not offer part-day care, especially for infants and toddlers, and in most areas it can be difficult to find.

Table 3.1.2 Percentile Analyses by Rate Type

Rate Type	Average maximum rate	Percentile of maximum rate	Average maximum enhanced rate	Percentile of maximum enhanced rate
Full-day	\$23.35	46	\$26.00	55
Part-day	\$17.71	47	\$19.82	54

Percentiles of the market to which maximum reimbursement rates potentially provide access also vary by age groups of the children served. In terms of percentiles at which reimbursement is possible, the greatest market access is seen for infants, however, as with part time care, infant care can be difficult to find.

Table 3.1.3 Percentile Analyses by Age Group

Rate Type	Average maximum rate	Percentile of maximum rate	Average maximum enhanced rate	Percentile of maximum enhanced rate
Infant	\$26.90	49	\$29.92	58
Toddler	\$23.69	45	\$26.35	54
Preschooler	\$20.47	45	\$22.83	53
School age	\$18.87	48	\$21.15	56

Finally, reimbursement percentiles varied by LWDA. The table below lists the percentiles of the market to which maximum reimbursement rates potentially provide access by LWDA. In the supplemental report, detailed tables list maximum reimbursement rates and market rate access by facility type, age of child, and LWDA, for both regular rates and maximum enhanced rates.

Table 3.1.4 Percentile Analyses by LWDA

LWDA	Average maximum rate	Percentile of maximum rate	Average maximum enhanced rate	Percentile of maximum enhanced rate
1 Panhandle	\$17.72	39	\$19.85	48
2 South Plains	\$16.67	43	\$18.41	50
3 North Texas	\$16.58	46	\$18.44	54
4 North Central Texas	\$24.29	53	\$26.77	60
5 Tarrant County	\$23.38	46	\$26.42	55
6 Dallas	\$20.65	43	\$24.68	56
7 North East Texas	\$17.06	51	\$19.62	62
8 East Texas	\$19.20	53	\$20.98	61
9 West Central Texas	\$14.69	36	\$16.03	43
10 Borderplex	\$15.47	44	\$17.46	53
11 Permian Basin	\$16.61	38	\$18.28	46
12 Concho Valley	\$17.21	42	\$19.79	55
13 Heart of Texas	\$16.42	41	\$19.27	55
14 Capital Area	\$24.48	38	\$26.75	44
15 Rural Capital	\$23.49	42	\$27.48	55
16 Brazos Valley	\$18.83	39	\$20.54	46
17 Deep East Texas	\$16.91	41	\$18.46	50
18 South East Texas	\$16.32	37	\$18.28	46
19 Golden Crescent	\$15.99	39	\$17.45	45
20 Alamo	\$22.31	45	\$24.36	52
21 South Texas	\$17.69	51	\$19.58	58
22 Coastal Bend	\$19.32	48	\$21.38	55
23 Lower Rio Grande Valley	\$15.04	41	\$18.05	53
24 Cameron County	\$13.92	31	\$15.75	40
25 Texoma	\$21.52	53	\$23.68	62
26 Central Texas	\$16.05	41	\$17.50	48
27 Middle Rio Grande	\$15.35	49	\$17.65	61
28 Gulf Coast	\$22.62	48	\$24.73	54

4. SPECIAL ANALYSES

4.1 SPECIAL ANALYSES — SERVICES AND ENROLLMENT

Table 4.1.1 Special Analyses: Texas Services and Enrollment

Facility Type	Non-traditional hours	Offers transportation	Accreditation	Texas Rising Star	Percent serving any subsidized children	Percent of enrollment that is subsidized	Number of children enrolled	Number of facilities
Licensed Child Care Centers	6.6%	49.4%	16.0%	12.9%	54.5%	16.9%	130959	1363
Licensed Child Care Homes	10.3%	18.7%	10.4%	7.7%	22.9%	10.1%	2105	232
Registered Child Care Homes	9.3%	12.6%	2.7%	1.9%	12.0%	5.9%	3194	502
All Facility Types	7.8%	36.1%	11.7%	9.3%	39.4%	16.5%	136259	2097

4.2 SPECIAL ANALYSES — ADMINISTRATIVE CATEGORIES

Table 4.2.1 Special Analyses: Texas Administrative Categories

	Non-Profit		For-Profit		Community based		Number of Facilities
	Sectarian	Non-sectarian	Sectarian	Non-sectarian	Non-profit	For-profit	
Licensed Child Care Centers	13.8%	25.4%	1.6%	54.7%	0.5%	0.7%	1363
Licensed Child Care Homes	0.0%	7.1%	1.6%	83.8%	0.0%	0.5%	232
Registered Child Care Homes	1.0%	18.0%	0.4%	73.1%	0.0%	1.3%	502
All Facility Types	8.7%	21.2%	1.3%	63.1%	0.3%	0.8%	2097

APPENDICES

APPENDIX A. DATA ANALYSIS

It is important to note that *all* of the daily market rates and percentiles presented in this report are based on large and statistically reliable sample sizes. Even in the scarcest categories of care, such as part-day infant and toddler care in Homes, the numbers of rates gathered were sufficient for estimating highly stable rates, due to innovations in the estimation methodology described below.

Levels of Analysis

Project researchers summarized the survey data and conducted analysis at several distinct levels. The most basic analyses were done at the level of individual providers. These results, which appear in the Special Analyses section of the report, document the proportion of providers responding to the survey that offer various services (e.g., non-traditional hours, transportation), or that fall into different administrative categories (e.g., sectarian, community-based, and for-profit). The exception to this rule is the one item that measures the “percent of enrollment that is subsidized,” which is analyzed at the level of the individual child. A similar item concerns the percentage of *facilities* that serve any subsidized children. When this number is higher than the “percent of enrollment” number, it indicates that the subsidized children in an area are widely dispersed among facilities, and when it is lower, it indicates that the subsidized children are relatively concentrated among a smaller number of facilities in the area.

The remaining analyses were conducted at either the rate observation level or at the level of the child care slot, as described below. Each center or home-based facility can contribute more than one rate observation to the analysis, and each rate observation can represent more than one slot. However, the nature of this relationship depends on the type of facility. Also, in a new addition for 2018, rates were included from both this survey and administrative records regarding approved subsidy rates, so different procedures were also followed for administrative records, as described later.

Among survey data gathered, daily market rates for licensed centers were captured for all categories of care offered, regardless of whether any children were currently being served in such categories. The categories consisted of all possible combinations of age group (gathered for actual age categories in which each center offered rates, but aggregated to the four standard categories for reporting) by Full-day status (part-day or full-day). Thus, one center could contribute as many as eight independent rate observations, each representing any number of children (including zero). These rate observations were then weighted by the number of child care slots they represent (described below) when calculating market rate percentiles.

In contrast, market rates for surveyed home-based facilities, including registered homes and licensed homes, were gathered at the level of the individual child currently being served. Each child's age, detailed weekly schedule, and rates charged were gathered for purposes of calculating daily market rates. In this case, the individual children were treated as independent rate observations, and each facility could contribute as many as nine observations (or fewer depending on the facility type and number of children enrolled). Because of this, there was no need to differentially weight the rate observations when calculating the local market rate percentiles for surveyed home-based facilities: each child (or rate) started with a weight equal to one (but see weighting discussion below).

For the analysis of surveyed center rates, the number of child care slots for each rate category was determined in one of two ways. First, for categories of care in which children were currently being served, the number of children in each category served as a proxy for the number of slots. Second, rate categories in which no children were currently being served were also included in the analysis, since they were also theoretically part of the market. This was done by estimating the number of slots for each of these rate categories with a formula that multiplies the number of children served at each facility by the average proportion of children, across all licensed centers, served in each rate category. Thus, for example, a facility that served 100 children and had an existing part-day infant rate schedule, but did not currently serve any part-day infants, would have its number of slots for this category of care estimated at two ($100 \text{ child capacity} \times 2 \text{ percent of children served in the part-day infant category across all licensed centers}$). If the same facility served no part-day preschoolers, its number of slots would be estimated at seven ($100 \text{ child capacity} \times 7 \text{ percent served in this category across all licensed centers}$). This method allows fuller use of the rate information gathered from surveyed centers, especially for rare forms of care in which rate observations were otherwise scarce.

Statewide Estimation

For statistics conducted at various levels of analysis, special procedures were necessary in order to compute statewide versions of the tables. Due to the fact that smaller, less populous areas were over-sampled for this survey (meaning that facilities in these areas were more likely to be selected for the survey), a correction had to be applied in order to estimate statewide rates without over-representing facilities in these smaller areas. Finally, starting with the 2018 survey, subsidized facilities were also under-sampled in order to concentrate survey resources on non-subsidized facilities whose data are more difficult to gather, while amending data on subsidized facilities by introducing administrative records data. The correction for both these factors involves computing weights that, when applied to the statewide analysis, equalize the probability that any given facility or rate might have been selected at random.

The calculation of weights for statewide estimation varies slightly depending on the level of analysis: facility level or rate level (see preceding discussion). For facility-level analyses (as in the Special Analyses section), the weight is the inverse of the probability of selecting the facility at random. Thus, for small areas in which all facilities were selected, the weight would equal one. For larger areas in which, for example, 20 percent of facilities were selected, the weight would equal five (1 divided by 0.20). When these weights are applied to any given statistical analysis, the facility with a weight of five would count five times as much as the facility with a weight of one, and the result would be representative of the state as a whole. Calculation of statewide rates is similar to estimation of local rates in that each rate is weighted according to its share child care slots.

Addition of Rates from Administrative Records

For the first time in 2018, the child care daily market rates in this report were estimated by including both data from the survey and data from administrative records maintained by TWC known as approved rates. These approved rates were subjected to several screens, then special weights were calculated (described next) so that their share of care provided would not be overstated.

A database of approved rates was provided by TWC in June 2018, from which subsidized rates were drawn. Rates from facility types other than Licensed Centers, Licensed Homes, or Registered Homes were excluded from further analysis. Only rates that were indicated as active rates as of February 15, 2018¹¹ were included, which had the effect of eliminating redundant rates from the same provider. Also excluded were rates for anything other than “regular day care,” which eliminated night and weekend rates. At this stage there were 47,622 rates from approved subsidy data.

The next step was to remove 7935 rates from facilities that had been surveyed, to avoid double-counting these rates. Finally, after removing a small number of rates from facilities who could not be linked to the survey frame¹² or whose capacity was unknown, 38,467 rates remained. For these rates, the number of slots attributed to each rate was estimated by a statistical model utilizing the facility’s reported capacity, the typical share of slots allocated to each age group and full or part day status, and the estimated share of slots dedicated to subsidized children in facilities of this type.

¹¹ This date is the approximate midpoint of the survey field operation.

¹² Some of the facilities removed in this step likely opened after the sample was drawn in August 2017.

Weighting Adjustment to Account for Administrative Records

When incorporating approved subsidy rates from administrative records, it was necessary to calculate and adjust weights so that any estimation of rates, whether local or statewide, would reflect the typical balance of subsidized and non-subsidized care. Generally speaking, since so much more data on subsidized rates are now available, weights for these rates need to be smaller to prevent their contribution to the rate market from being overstated. Table A-1 summarizes the results of this weighting adjustment.

Table A-1. Weighting Summary

	Surveyed		Not Surveyed
	Not Subsidized	Subsidized	Subsidized
Number of Rates	4621	5753	38467
Number of Facilities	930	1096	5979
Sum of Rate Weights	10741.0	1436.6	10371.9
Sum of Slot Weights	97509.2	17414.6	57554.5

The first two rows of Table A-1 show the number of rates and number of facilities contributed in each of three categories of facilities formed by whether the rates came from survey data, administrative records (subsidized) data, or both. For rates that came from both data sources (middle column, shaded darker gray), a separate analysis showed general agreement between the sources, but only the surveyed rate was allowed to contribute to the final analysis. The weight assigned to any given rates depends critically on which of these three categories it lies.

Rates that were drawn from subsidized facilities (right two columns) were assigned lower weights by the formulas described above regardless of whether they originated from surveyed or administrative records data. Thus, although a total of 10,374 rates was contributed by the survey (first two columns), compared to almost four times as many (38,467) rates from approved subsidy rate data, this imbalance is corrected through the calculation of rate-level weights and numbers of slots. In the end, after all calculation of weights and adjustments (bottom row), subsidized care (right two columns) carries about 43 percent of the total weight in the analysis of rates. This is broadly consistent with estimates of the statewide share of facilities serving subsidized children provided by this survey over the years, which ranged from 32 to 37 percent in the 2014, 2015, and 2016 surveys.

Small-Area Estimation

In many smaller LWDA and for some exceptionally rare rate categories (particularly part-day infant and toddler care in homes) the number of rate observations would have been too small to estimate stable rates using traditional methods, even for the many areas in which the entire universe of facilities had been sampled. For this reason, an estimation methodology first developed for the 2010 survey was used. Using this approach, parameters are estimated that fully characterize the distribution of rates in each category of care. These parameters are then applied, using an assumption of normality of the rate distributions, to estimate each rate percentile of interest. The primary advantage of this solution is that a medium to large sample size of rates is utilized to estimate each parameter, thus the estimates based on this methodology are more stable over time, and they fall into the expected patterns more frequently.

Prior to any estimation of parameters, the daily rates themselves are first transformed to make them assume a more normal distribution. This transformation is done by taking the positive square root of the daily rate. The effect of this is to minimize the influence of high-end outliers on estimates of the parameters of distributions¹³. This transformation is reversed later, following all estimation, by squaring the rates. The next step in the estimation of parameters involves estimating area effects, the average rate for each LWDA, while statistically controlling for all other features of the rates involved in the estimation (including facility type, age group, and rate type). The average rates for all 28 LWDA are listed in Table A-2. Note that the Capital Area (LWDA 14) has the highest rates, and Middle Rio Grande (LWDA 27) has the lowest rates in the state.

Levels of variation or spread among rates in each area, as indicated by the standard deviation measure, are also listed for LWDA in the last column of Table A-2. Note that those areas with the highest average rates also tended to have greater spread among rates. Note also that the average level and spread of rates in each LWDA was estimated with 280 or more independent rate observations. Thus, these parameters are estimated with a high level of precision.

The next step involves estimating the typical patterns among rates of varying facility type, age group, and rate type, while holding constant the area effects measured above. This estimation was done using one model for licensed centers that included independent predictor variables for the four age groups and full-day vs. part-day care. A second model was used to estimate these parameters for all homes combined, but an additional variable was included that coded for Licensed or Registered Home. Results of this estimation step are shown in Table A-3. In this case, the typical rates are shown in standard deviation units. Thus, the first row of Table A-3 can be interpreted to mean that full-day infant rates in centers tend to be roughly six-tenths of a standard deviation higher than the average rate.

¹³ High rates have greater influence on estimates of the distribution of daily rates due to the simple fact that rates cannot go below zero, but there is no effective upper limit. Square root transformation mutes this influence.

Table A-2. Area Effects, Untransformed Rates

LWDA	Observations	Average¹⁴	St. Dev.
1 Panhandle	777	20.59	7.60
2 South Plains	860	19.09	7.13
3 North Texas	624	17.92	7.70
4 North Central Texas	3563	24.17	11.83
5 Tarrant County	3428	25.20	10.99
6 Dallas	4411	23.35	10.76
7 North East Texas	548	17.43	7.32
8 East Texas	1267	18.78	7.61
9 West Central Texas	568	17.65	7.07
10 Borderplex	2421	17.12	7.66
11 Permian Basin	631	19.59	7.26
12 Concho Valley	282	19.01	6.12
13 Heart of Texas	692	18.72	6.91
14 Capital Area	2179	29.34	11.68
15 Rural Capital	1633	26.61	10.17
16 Brazos Valley	666	22.24	9.05
17 Deep East Texas	501	18.59	6.96
18 South East Texas	728	19.40	7.34
19 Golden Crescent	421	18.98	8.12
20 Alamo	3392	24.26	9.49
21 South Texas	716	17.81	8.03
22 Coastal Bend	1006	20.77	10.02
23 Lower Rio Grande Valley	3040	17.54	8.62
24 Cameron County	1165	17.57	7.28
25 Texoma	395	21.13	6.86
26 Central Texas	1446	18.28	7.55
27 Middle Rio Grande	360	16.07	6.32
28 Gulf Coast	11121	23.76	10.65

¹⁴ For ease of illustration, figures in this table represent the average and standard deviations of untransformed rates, though transformed rates were used in actual calculations.

Table A-3. Rate Type Effects

Facility Type	Age Group	Rate Type	Observations	Deviation from Average Rate
Licensed Child Care Centers	Infant	Full-day	4394	0.617
		Part-day	2335	0.166
	Toddler	Full-day	4828	0.444
		Part-day	2824	0.024
	Preschool	Full-day	5811	0.216
		Part-day	5474	-0.341
	School age	Full-day	5117	0.001
		Part-day	5268	-0.514
Licensed Child Care Homes	Infant	Full-day	811	0.121
		Part-day	419	-0.192
	Toddler	Full-day	1375	0.274
		Part-day	468	-0.139
	Preschool	Full-day	939	0.078
		Part-day	609	-0.329
	School age	Full-day	592	-0.293
		Part-day	664	-0.643
Registered Child Care Homes	Infant	Full-day	1059	0.152
		Part-day	425	-0.432
	Toddler	Full-day	1800	0.190
		Part-day	474	-0.503
	Preschool	Full-day	1003	-0.126
		Part-day	673	-0.704
	School age	Full-day	618	-0.581
		Part-day	861	-0.838

Note that in all combinations of care type, the number of observations in Table A-3 is more than sufficient for estimating the patterns among rates to a high degree of precision.

Finally, the 28 area effects from Table A-2 are recombined with the 24 rate type effects from Table A-3 to estimate the parameters (mean and standard deviation) of the distributions of all 672 categories of care in the full report. Using these parameters together with known properties of normal distributions, one can then estimate percentiles of the rate distributions for all categories of care. As described above, these figures are then squared to undo the transformation described above. Overall, the resulting percentile estimates were found to be much more stable over time, in comparison to estimates made for small areas using the methodology of market rate surveys prior to 2010.

Natural Disaster

In August 2017, just as the survey was being prepared for fielding, Hurricane Harvey struck the gulf coast, causing unprecedented destruction and flooding across a broad swath of southeast Texas. In order to minimize the chances of this event negatively impacting the survey findings, the research team used an algorithm to probabilistically assign facilities in counties most affected by the storm to later blocks of the survey, so that their surveys could be delayed by several months in the hopes that any facilities affected would have extra time to recover, and re-open if necessary. An authoritative list of 39 affected counties was drawn from the Federal Emergency Management Agency’s (FEMA) website¹⁵ showing which counties had been declared disaster counties designated for “individual assistance” on August 25, 2017.

Table A-4. Surveys Completed in Disaster and Non-disaster Counties

	Disaster Counties		Non-Disaster Counties	
	Centers	Homes	Centers	Homes
Oct-2017	2	1	74	30
Nov-2017	10	0	285	267
Dec-2017	12	0	148	114
Jan-2018	10	0	254	211
Feb-2018	36	52	332	415
Mar-2018	164	93	290	233
Apr-2018	122	129	97	91
May-2018	15	8	30	6
Completion Rate	77.1%	41.7%	73.0%	45.1%

¹⁵ Web page accessed on October 5, 2018: <https://www.fema.gov/disaster/4332>

As shown in Table A-4, this strategy resulted in the bulk of facilities in disaster counties being surveyed between February and May, 2018. This was only partially successful in avoiding impacts of the storm, however, since the resulting completion rate in disaster counties was still a few percentage points below that seen in non-disaster counties (last row of table A-4). To adjust for this minor shortfall, a 'disaster county' indicator was included in the response bias model, described next, resulting in a slight increase in weights for facilities in these counties. The fact that facilities in these counties were surveyed later should have little additional influence on the average values of rates gathered, since most facilities that increase their rates do so in the fall before school starts. It is not known at this point whether non-responding facilities in these disaster counties were closed temporarily, permanently, or otherwise. No additional adjustments are necessary.

Response Bias Adjustment

In order to adjust for any bias due to what types of facilities responded to the survey, a response model was developed using logistic regression. Predictors for this regression included only measures derived from registry data maintained by the Texas Department of Family and Protective Services (DFPS). This ensured that no facilities would be excluded due to missing data. These measures included indicators for self-reported features of care provided including accreditation, offers transportation, accepts subsidies, serves infants, toddlers, preschoolers, school age, special needs children, special skills, field trips, get well care, as well as after school, drop in, part time, or weekend care. Additional measures included the facility age in years, based on the initial license issue date, as well age squared to account for potential quadratic effects. Finally, an indicator of whether or not the facility was located in a disaster county, as described above, was also included. The dependent or response variable for this regression was an indicator showing whether the facility completed the survey, in whole or in part. Facilities determined to be ineligible for the survey were excluded from the regression.

The results of this response model indicated only a small overall response bias (model R-squared = .043 in centers, .031 in homes). Weights were computed by inverting the estimated probability of response for individual facilities, and were included in analyses to allow adjustment for this minimal bias at either the facility or rate level. These weights were combined with the other weights described earlier.

APPENDIX B.
2018 QUESTIONNAIRES: LICENSED CHILD CARE CENTERS

1. Date: _____
2. Interviewer: _____
3. Hi. Can I please speak to the director of (CENTER NAME)? Hi, my name is _____ and I'm calling from the University of Texas at Austin on behalf of the Texas Workforce Commission. We are conducting the annual childcare market rate study. Do you have about 5 minutes to answer questions about your center?
 - Accept - Continue with survey
 - Refusal
 - Overdial
 - Not eligible
 - Wrong number - New number is available _____
 - Withdrew

4. Does your facility offer full time child care at least 6 hours per day and five days a week?
5. If no, does your facility offer school care or part day child care (<6 hours) five days a week?
6. Is your facility any of the following?
 - Only a drop-in care center (no regular rates; i.e., gym, hospital, mall)
 - A Head Start program
 - A free child care service
 - A facility not open to the public/only serves specific groups
 - A facility offering only summer camps
 - A kindergarten or school not offering regular child care or after-school care
 - None of the above- Continue Survey

7. What are your hours of operation (M-F)?

Weekday	Open	Close
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		

8. What are your hours of operation on Saturday and Sunday, if any?

Weekday	Open	Close
Saturday		
Sunday		

9. How many days out of the year do you close for national, state, or religious holidays?
10. Outside of weekends and holidays, how many days out of the year do you close for personal vacation, summer, or any other reasons?
11. Do you regularly offer drop-in care?
- Yes
 - No
 - Don't know

12. Altogether, how many children are enrolled at your center?
- Number of Children Enrolled: _____
- Number of Age Groups: _____

13. What are the age groups on which your rate structure is based?

Group	Age Range in Months		Total Enrolled		Comments about age group
	Min	Max	Full Time 5 days, 6+hrs	Part Day 5 days. <6 hrs	
1					
2					
3					
4					
5					
6					
7					
8					

14. Full Time Rates: Ask about each age group
- a. What are your standard full-time rates (6+hrs per day/5 days per week) for children in Age Group__?
 - b. Is that rate per hour, day, week, month, or year?
 - c. How many days of care per week does this rate cover?
 - d. Do you currently have a full-time waitlist for this group?
15. Part Day Rates: Ask about each age group
- a. What are your standard part day rates (Less than 6 hrs per day/5 days per week) for children in Age Group__?
 - b. Is that rate per hour, day, week, month, or year?
 - c. How many days of care per week does this rate cover?
 - d. Do you currently have a part day waitlist for this group?

16. Additional Weekend Rates

- a. What are your standard Additional weekend rates for children in Age Group ___?
- b. Is that rate per hour, day, week, month, or year?

17. Rate Comments: _____

18. Fees: Do you charge a _____ (in addition to the regular rate)?

	Yes	No	Unsure	Amount
One time registration fee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Yearly or semester enrollment fee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional activity or supply fee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

a. If enrollment fee is Yes: Is your enrollment fee per _____?

- Semester
- Academic Year
- Calendar Year

b. If activity fee is Yes: Is your activity fee per _____?

- Month
- Semester
- Academic Year
- Calendar Year

c. Comments about additional rates:

19. Do you provide any discounts in the form of a sliding scale? (Note: If offer scholarships to some children, count as sliding scale)

- Yes
- No
- Don't know

20. Do you accept CCS children (children receiving subsidies)? How many slots do you allocate for CCS children?

- Do not accept CCS children
- Accept CCS children, do NOT allocate a specific number of slots
- Accept CCS children, allocate specific number or percent of slots: _____
- Don't Know

If no-> Is there a reason you do not accept CCS children?

- Not currently caring for CCS children but do accept
- In process of setting up
- Families have not requested or needed
- Paperwork/reporting requirements
- Reimbursement rates too low
- Not receiving/receiving late parent co-pays
- Not receiving/receiving late CCS payments
- Facility is full/fills too quickly
- Facility is new/too small
- Need more information/training
- Not set up: No reason provided
- Owner's decision: No reason provided
- Other:

If yes-> Do you charge families an additional amount if their total CCS subsidy plus parent co-pay is less than your established rate?

- Yes
- No
- Don't know
- Does not apply

21. Does your center offer regular transportation? (Excludes field trips)

- Yes
- No
- Don't know

22. Is your child care center a for-profit or non-profit facility (501.C3 status)?

- Non-Profit
- For-Profit
- Don't Know

23. Is your child care facility _____?

- Part of a local or regional chain
- Part of a national chain
- Independently owned
- Other _____
- None of the above
- Don't know

24. Is your child care associated with any of the following?

- Church or religious organization
- Community-based organization
- YMCA/ YWCA
- Public school
- Private or parochial school
- Military institution
- Other _____
- No associations
- Don't know

25. Does your facility receive any of the following services for free or at a reduced cost?

- Building use
- Utilities
- Volunteer work
- Furniture or equipment
- Supplies
- Other _____
- None
- Don't know

26. Does your facility receive any donations?

- Federal Child Care Food Program
- CCMS (other than subsidies)
- United Way
- Religious institutions
- Local, state or federal government funding
- Private or individual donations
- YMCA / YWCA
- School district
- Foundations
- Other _____
- No donations
- Don't know

27. In addition to your state operating license, does your center have any of the following national accreditation or certifications?

- NAEYC - National Association for the Education of Young Children
- NAFCC - National Association for Family Child Care
- NACC - National Association of Child Care Professionals
- Montessori Accreditation
- Other: _____
- No accreditations
- Don't Know

28. Is your service certified as a Texas Rising Star provider?

- Yes, number of stars: _____
- No
- Don't know

29. General comments: _____

Thank you for your time.

APPENDIX C.
2018 QUESTIONNAIRES: REGISTERED AND LICENSED CHILD CARE HOMES

1. Date: _____
2. Interviewer: _____
3. Hi, Can I please speak to the director of (CENTER NAME). Hi, my name is _____ and I'm calling from the University of Texas at Austin on behalf of the Texas Workforce Commission. We are conducting the annual childcare market rate study. Do you have about 3-5 minutes to answer questions about your center?

- Accept - Continue with survey
- Refusal
- Overdial
- Not eligible
- Wrong number - New number is available _____
- Withdrew

4. Are you a registered or licensed home child care provider?

- Registered Child Care Home (RCCH)
- Licensed Child Care Home (LCCH)
- Neither- Not Eligible

5. What are your hours of operation (M-F)?

Weekday	Open	Close
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		

6. What are your hours of operation on Saturday and Sunday, if any?

Weekday	Open	Close
Saturday		
Sunday		

7. Do you regularly offer drop-in care?

- Yes
- No
- Don't know

8. How many days out of the year do you close for national, state, or religious holidays?

9. Outside of weekends and holidays, how many days out of the year do you close for personal vacation, summer, or any other reasons?

10. Altogether, how many children including your own are you currently caring for at your home?

Number of ALL Children: _____

11. How many of these children are either not paying or paying at discounted rates because they are friends or family?

Number of Discounted Children: _____

12. Total Eligible Children: _____

For Interviewer purpose only, I am only going to ask about the ___ children not receiving friend or family discounting rates.

13. How many of these children receive subsidized care through CCS? _____

->If 0: Is there a reason you do not accept CCS children?

- Not currently caring for CCS children but do accept
- In process of setting up
- Families have not requested or needed
- Paperwork/reporting requirements
- Reimbursement rates too low
- Not receiving/receiving late parent co-pays
- Not receiving/receiving late CCS payments
- Facility is full/fills too quickly
- Facility is new/too small
- Need more information/training
- Not set up: No reason provided
- Owner's decision: No reason provided
- Other: _____

->If 1 or more: Do you charge families an additional amount if their total CCS subsidy plus parent co-pay is less than your established rate?

- Yes
- No
- Don't know
- Does not apply

14. For this next question, I will ask about each child's age and schedule. If you care for siblings, please list them together by family.

- a. How old is the youngest child in the first family?"
- b. What time does this child arrive on ____? (M-Su)
- c. What time do they leave on ____? (M-Su)

C h i l d	Family ID		Ag e	M on		Tu es		W ed		Th urs		Fri		Sat		Su n
	F a m i l y	C h i l d	M o n t h s													
1																
2																
3																
4																
5																
6																
7																
8																
9																

*A=Arrive/*L=Leave

15. Rates

- a. Does child __ receive subsidized care through CCS? (Ask about all children)
- b. Rate Amount:
 - i. NON-CCS: What is the rate or cost of childcare for this child?
 - ii. CCS/CoPay: Can you tell me the amount you receive from CCS? / What is the parent Co-Pay?
 - iii. CSS Total Only: How much money do you receive in total for the care of this child?
- c. Is that rate per hour, day, week, month, or year?
- d. Does this child receive a multiple child discount?
- e. How many children are covered under this rate?
- f. Rate Comments: _____

16. Fees: Do you charge a _____ (in addition to the regular rate)?

	Yes	No	Unsure	Amount
One time registration fee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Yearly or semester enrollment fee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional activity or supply fee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

a. If enrollment fee is Yes: Is your enrollment fee per _____?

- Semester
- Academic Year
- Calendar Year

b. If activity fee is Yes: Is your activity fee per _____?

- Month
- Semester
- Academic Year
- Calendar Year

c. Comments about additional rates: _____

17. Do you offer regular transportation as defined by using your own personal vehicle to transport children (excludes field trips)?

- Yes
- No
- Don't know

18. Do you have a waitlist for any age groups? If so, which ones?

- Infants (0-17 months)
- Toddlers (18-35 months)
- Preschool (36-71 months)
- School Age (72+ months)
- No Waitlist
- Don't know

19. Is your child care home a for-profit or non-profit child care home (501.C3 status)?

- Non-Profit
- For-Profit
- Don't Know

20. Is your child care associated with any of the following?

- Church or religious organization
- Community-based organization
- Other _____
- No associations
- Don't know

21. In addition to your state operating license, does your home have any of the following national accreditation or certifications?

- NAEYC - National Association for the Education of Young Children
- NAFCC - National Association for Family Child Care
- NACC - National Association of Child Care Professionals
- Montessori Accreditation
- Other: _____
- No accreditations
- Don't Know

22. Is your service certified as a Texas Rising Star provider?

- Yes, number of stars: _____
- No
- Don't know

23. General comments:

Thank you for your time.