2009 Local Child Care Market Rate Study

Executive Report

for

The Delaware Division of Social Services

Submitted by Workplace Solutions
Reading, MA
(781) 944-3635
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OVERVIEW

The 2009 Delaware Child Care Market Rate Study was conducted to meet federal requirements of 45 Code of Federal Regulations Parts 98 & 99 to ensure that reimbursement rates allow subsidized low-income children equal access to early education and care. The goal of this Rate Study was to develop statistically credible information on the present market prices charged by licensed and exempt providers in Delaware. “Market prices” are prices providers charge parents for the care of their private-paying children. They are non-discounted prices charged to unrelated and unaffiliated parents.

The Delaware Division of Social Services (the Division) contracted with the consulting firm Workplace Solutions, located in Reading Massachusetts, to undertake this study. The firm has conducted six previous child care market rate studies for the Division and has substantial experience with these surveys. Workplace Solutions' consulting group consisted of a team of researchers including: Marie Sweeney (MBA, M.Ed.), Principal of Workplace Solutions; Peter Schmidt (Ph.D., Economics), University Distinguished Professor of Economics, Michigan State University; William Horrace (Ph.D., Economics, MBA Finance), Professor of Economics, Syracuse University and Ann Witte (Ph.D., Economics), Professor of Economics, Wellesley College. Project Manager Marie Sweeney worked closely with the Division’s Project Coordinators Eulinda DiPietro and Barbara McCaffery to plan and implement the study.

Because of the importance of obtaining accurate pricing information, the study was carefully planned and executed. The project began in January 2009. The Division and Workplace Solutions planned the study during January and February. Interviews were conducted over a five-week period, during March and April. The researchers submitted final estimates of the 75th percentile of prices to the Division in April 2009.

The following section describes the methodology for the Market Rate Study. This includes descriptions of the sample design, the selection of the sample, the survey, and the interviews in the field. The next section describes the findings of the survey including the range of prices at the 75th percentile, the response rates, and the accuracy of the estimates of the price percentiles reported in the study. The section contains estimates of both prices charged by Delaware providers and prices paid by Delaware families. To discern price trends, the section compares 2009 prices with prices charged in 2007 as reported in the 2007 Delaware market rate study.

The final page of the report contains three tables presenting the 2009 75th percentile prices for the center and family child care markets. Table A contains the full-time daily prices at the 75th percentile for family child care for Kent, Sussex and New Castle counties. It also contains the minimum price reported in the county, the maximum price reported in the county, and the price observations used to determine the 75th percentile (n). Table B contains the family child care full-time daily prices at the 75th percentile for infant, toddler, and preschool care as well as part-day prices for school-age care. Table C contains the center full-time daily prices at the 75th percentile for infant, toddler, and preschool care as well as part-day prices for school-age care.

METHODOLOGY

Workplace Solutions implemented the survey to obtain prices for private-paying children actually in care at the time of the study. The researchers selected a representative sample of providers throughout Delaware and interviewed the sample providers by telephone. Utilizing the prices obtained through the interviews, researchers calculated the 75th percentiles of market prices for full-time infant, toddler, and preschool care and for part-day school-age care. Estimates of the accuracy of the 75th percentiles of 2009 market prices confirm that the Delaware market rate study achieved a high degree of precision.

The Sampling Frame

The sampling frame for the family child-care sample consisted of Delaware's Office of Child Care Licensing's data of licensed family child care and large family child care providers as of February 2009, merged with Children and Families First (CFF) data of licensed family child care and large family child care providers as of March 2009. The sampling frame for the center/school-age sample consisted of Delaware's Office of Child Care Licensing's data of licensed center/school-age providers as of February 2009, merged with Children and Families First data of licensed and exempt center/school-age providers as of March 2009. This comprehensive sampling frame allowed all providers in the state to have the opportunity to be selected for the rate study interview and reduced the likelihood of a non-representative sample. This also enabled the researchers to design the center sample by age category.

As part of the development of an accurate sampling frame, the Division, Workplace Solutions, and Children and Families First reviewed the center, school-age and family child care data to delete providers in categories that were outside the parameters of the study. These included providers that only served a niche in the child care market (drop-in care), were not open to the general public (employer-supported programs only for employees' children), were significantly subsidized by the federal government (Head Start), or did not provide child-care services for the targeted timeframe (nursery schools). After eliminating these programs from the sampling frame, the consultants then determined that the total number of providers eligible for the study (the sampling frame) was 1704 providers. This sampling frame included 385 licensed and exempt center/school-age providers and 1319 licensed family child care and large family child care providers.

The Sampling Plan

The researchers developed a Sampling Plan to select a stratified random sample of the providers eligible for the study. This was developed in order to determine the child care prices of various market segments in Delaware. The sample design built upon the design and results of the 2007 Delaware Child Care Market Rate Survey. The 2009 sampling plan targeted all licensed and exempt providers in the state that qualified for the study, and called for sampling 45% of the providers. The consultants planned the sample to equalize the accuracy with which the market percentiles are estimated for the center and for the family child care market segments.

The researchers designed the sample for full-time care for centers and family child-care providers and for part-day care for school-age care. The sample was segmented by:

- geographical region
- type of care
- age groupings for center care

Regions were the three counties in the state: Kent County, Sussex County, and New Castle County. The *types of care* were (1) center and school-age care and (2) family child care and large family child care. The *age-groupings* were infant, toddler, preschool and school-age.

The Selection of Providers

The economists selected providers at random from the sampling frame for each market segment. That is, they selected a separate random sample for each of the market segments or cells in the sample design, with each sample corresponding in size to the Sampling Plan. In all, the sample contained 594 family child-care providers and 173 center/school-age providers.

FCC		Center/School Age	
Sussex	221	Sussex	32
Kent	152	Kent	33
New Castle	221	New Castle	108
TOTAL:	594	TOTAL:	173

The researchers selected a wide range of providers throughout the state for the sample. These included: family child care providers, large family child care providers, centers serving all age categories, centers serving only one age category, multi-site child care providers, centers that were part of a large national organization, free-standing school-age programs, school-age programs that were part of a multi-age program, for profit programs and non-profit programs. The researchers also selected providers for the sample that reported scarce types of care in 2007 (i.e., infant care, odd-hour care).

The Questionnaire

Workplace Solutions designed the questionnaire to collect comprehensive and accurate information about prices charged to private-paying parents. The consultants utilized two surveys for this study: one for the center/school-age market, a second for the family child care and large family child care market. The consultants designed the survey to incorporate changes in the licensing regulations. Thus for this 2009 study, toddlers were defined as 12 months up to 36 months (one and two year olds), and preschoolers started at 3 years of age.

The *center survey* asked providers to quote their prices for:

- Private-paying infants enrolled full time
- Private-paying toddlers enrolled full time
- Private-paying preschool-age children enrolled full time
- Private-paying school-age children enrolled part-day, for less than 4 hours-per-day

The *family child-care survey* asked providers to quote individual prices for private-paying children in their care, since some FCC providers do not have a set rate for their care.

Thus, the FCC survey was designed to collect:

- A price-per-child, for up to eight private-paying children enrolled full time

- A price for a private-paying school-age child or children enrolled for part-day care (< 4 hours per day)

Odd-hour Care and Special Needs Care: The Division requested that information also be collected for odd-hour care and for special-needs care. Odd-hour care is evening care, overnight care and weekend care. Thus, the survey was designed to collect prices for odd-hour care for private-paying children as well as enrollment and cost information for children with special-needs.

Both the center and the family child care survey were designed to be easy for the providers yet enable the researchers to address the complex pricing strategies of the Delaware provider community and the nuances of the market.

The Marketing Steps to Encourage Provider Participation

During the planning phase of the project, the Division and Workplace Solutions planned and implemented various strategies to encourage providers to participate in the study:

- All family child care providers and center-sample providers received an announcement letter from Elaine Archangelo, Director of the Division of Social Services. The Director's letter informed them of the forthcoming Market Rate telephone interview and encouraged providers to participate if contacted for the study.

- As part of the announcement letter, providers also received a simple worksheet to help them prepare for the interview.

- Children and Families First mailed a letter to provider advisory groups throughout the state. The letter informed them of the forthcoming market rate study and asked them to encourage their members to participate.

- The Division and Workplace Solutions planned and held Information Sessions for providers in different locations in the state. At these meetings Division Project Coordinator Barbara McCaffery and Workplace Solutions researchers Professor William Horrace and Marie Sweeney explained the purpose and scope of the rate study and answered providers' questions.

- The Division mailed an announcement letter to all licensed providers in the state to inform them of the forthcoming Information Sessions and to explain the child care rate study.

The Interviews

A professional telephone interview group, Opinion Dynamics, was selected to conduct interviews. This group also conducted interviews for previous Delaware Child Care Market Rate Studies. Project Manager Marie Sweeney also assisted with the interviews. Interviews were conducted over a five-week period in March and April. The interviewers attempted to contact and interview all of the providers in the sample including many of the back-up sample providers that were added to the sample (e.g., all FCC back-up providers in Kent and Sussex were ultimately added to the sample). Interviewers made up to ten "call attempts" to reach the sample provider and obtain a completed interview. In all, 1126 providers were called for the rate survey interviews.

RESULTS

The 2009 Delaware Child Care Market Rate Study results include: providers reporting 2,172 prices for private-paying children actually in their care; a very high provider response rate and low refusal rate; a high level of accuracy in the estimation of the 75th percentile prices.

The Response Rate

The Delaware response rates show that the providers were overwhelmingly willing to participate in the study. A 95% response rate was obtained for the center/school-age interviews. A 74% response rate was obtained for the family child care interviews. In all, 629 providers reported prices for private-paying children in their care. These very high response rates reflect both the ongoing efforts of the Division of Social Services to encourage provider participation in the rate survey and the gracious cooperation of child care providers. The refusal rates for the study were quite low: 7% of the family child care sample and 3% of the center/school-age sample.

The Analysis of the Data

The researchers converted prices obtained in the interviews into daily rates and then estimated the 75th percentiles of the distribution of daily prices for each market segment. The 75th percentile price is such that 75% of the prices are at or below the price and 25% are above.

The three tables at the end of this report present summary findings for all 24 market segments in the study. (See Tables A-C of this Executive Summary for the estimated 75th percentiles.) In all, the researchers submitted ten tables of findings as part of the full report.

Accuracy of the Study

The goal of the Delaware Child Care Market Rate Study was to develop statistically credible information on the present market prices charged by child care providers in the state. This goal was met since the researchers used a statistically valid methodology, and since the relevant market prices were estimated with a verifiable and high degree of precision.

For the infant, toddler and preschool market segments for both the center and family child care markets, the 95% confidence interval is typically about plus or minus 5% of the estimate. This range was higher for family child care for infants in Kent and Sussex counties. All of the Kent and Sussex family child care providers were ultimately included in the sample and called for the interview. There simply were not very many Kent and Sussex family child care providers who had private-paying infants in their care. Therefore, the researchers combined these two cells into one K&S infant cell. This is justified since both had the same 75th percentile price ($25/day). These cells had also been combined in previous child care market rate studies. This improved the level of accuracy so that this cell is now in line with the other full-time cells.

For school-age care, the 95% confidence interval is typically about plus or minus 10% of the estimate. This is not because the confidence intervals are wider. It occurs because the prices are lower (this is not full-time care). The sampling design attempted to equalize accuracy in absolute terms, not percentage terms, across cells, so there is now a higher uncertainty in percentage terms when the prices are lower, as they are for school-age care.

For all of the market segments in the study, the level of accuracy achieved would be considered a more than acceptable high level of precision.

Range of Prices

Prices can vary widely in the state, by over 100% among different segments of the market. At the 75th percentile, results of the study reveal that the daily market prices for full time care range from $23 to $47. Part-day school-age prices range from $10 to $20.95.

Care is lower in price in family child care homes than in centers. For full-time toddler care in Kent County, at the 75th percentile it is $25 in family child care and $29 in center care. For full-time preschool care in Sussex County, at the 75th percentile it is $23 in family child care and $27 in center care.

75th Percentile Prices by County

Prices can also vary by geographic region in Delaware. For center and family child care, prices are highest for New Castle County and lower for Kent County and Sussex County. Prices in New Castle County are higher for all types of care and market segments. Prices at the 75th percentile are very similar or the same for Kent and Sussex market segments.

For center care, Sussex has the lowest priced care at the 75th percentile and New Castle the highest. However, the Sussex and Kent center prices are very similar. At the 75th percentile, New Castle prices are significantly higher: more than 50% higher than the Sussex prices for infant care and for school-age care.

For family child care, Kent and Sussex prices are the same or very similar. As with center care, New Castle prices at the 75th percentile are higher for all market segments. However the price disparity between New Castle and Kent/Sussex counties is less for family child care than for center care.

75th Percentile Prices by Age of Children

The 75th percentile prices for full-time care in centers decreases as the age of the child increases. This is true for all three counties. For example, for center infant care in Kent the 75th percentile price is $32 per day and the preschool price is $28 per day. This is also true for family child care in New Castle County (infant care is $32 per day and preschool care is $30 per day). However for family child care in Kent County this is not the case. Prices at the 75th percentile for Kent County family child care are the same for infant, toddlers and preschool-age children ($25/day). Thus the age of the child does not seem to be a factor in the pricing of full-time family child care in Kent.

School-age Children

For this study, school-age providers reported only prices for part-day care for less than four-hours per day. In all, the researchers obtained 282 prices for part-day school-age care from providers who had private-paying school-age children in their care. At the 75th percentile, school-age care in centers is higher priced than in family child care homes. For example, Kent part-day school-age care in centers is $14 compared to $10 in family child care.

Family Child Care

In all, 464 family child care providers participated in this study and reported 1662 prices for private-paying infant through school-age care. At the 75th percentile, full-time FCC daily prices range from $23 to $32 depending on the age category and the county. Part-day school-age prices at the 75th percentile range from $10 to $15 for care for less than four hours per day.

Center Child Care

In all, 165 child-care centers and school-age providers participated in the rate study interviews and reported 510 prices for private-paying children. These providers reported private prices for full-time care for infants, toddlers, and preschoolers and part-day care for school-age children. Full-time daily prices at the 75th percentile range from $27 to $47, depending on the age category and the county. Part-day school-age prices at the 75th percentile range from $13 to $20.95 for care of less than four hours per day.

Prices Paid by Delaware's Families

The prices estimates reported to this point are calculated from the prices charged by providers. The Division requested that the researchers also calculate prices that reflect actual child care *purchases* being made by families in Delaware. That is the prices paid by Delaware families. To obtain these prices, the researchers weighted the 75th percentile prices by the number of private-paying children reported for each age category. Thus, if a provider reported that they had a private-paying toddler in their care, the price was weighted by the number of private-paying toddlers in the provider's program. These prices are referred to as "weighted" prices and reflect all market transactions by private-paying parents.

For center care, these weighted prices tend to be somewhat higher than the "per provider" prices for full-time care. As an example, the daily price at the 75th percentile charged by New Castle center providers for toddler care is $41; weighted per private-paying children it is $46. For part-day school-age care in centers, the weighted prices are lower than the provider prices or are the same. For FCC providers, the weighted prices are the same or very similar to the provider prices.

Odd-Hour Care

FCC providers reported 26 prices for odd-hour care they had recently provided for private-paying children. The 75th percentile price for odd-hour care for New Castle County is $9.00/hour; for Kent/Sussex Counties it is $9.50/hour.

Special-Needs Care

In all, 24% of providers interviewed indicated that they were serving a child or children with special-needs in their program. Of the center providers, 62% reported that they were serving a child or children with special needs. For family child care providers, only 10% reported that they were currently providing services to a child with special needs.

In all, 85% of the providers in the study who were serving a child or children with special needs reported that there were no additional costs incurred to serve these children. Thus, the majority of providers who were serving children with special needs reported that there were no additional costs for them to serve these children.

The Division requested that the researchers also conduct a differential analysis to determine if providers who were serving children with special needs charged higher prices than providers who had no children enrolled with special needs. This is to determine if providers who have children enrolled with special needs pass along possible higher costs for serving these children to all of the children in their care. To determine this, the economists compared the prices charged by providers who had children enrolled with special needs in relation to the prices charged by providers who had no children enrolled with special needs.

To make these comparisons the researchers defined ten cells: Kent full time, New Castle full time, Sussex full time, Kent and Sussex (combined) school age, and New Castle school age. This was done both for centers and for family child care. When the researchers compared the prices actually charged by providers that do and do not serve children with special needs, they found no clear pattern. In six of the cells providers that served children with special needs charged higher prices, and in four they charged lower prices. These differences were never large and in only one case (Kent centers, full time) was the difference statistically significant. Thus it does not appear to be the case that Delaware providers who serve children with special needs charge higher prices than other providers to offset any higher costs associated with serving children with special needs.

Thus the majority of providers who had children with special needs enrolled reported that there were no additional costs to have these children in their program. In addition, the differential analysis did not seem to support the hypothesis that these providers were passing along possible higher costs to their total enrollment of children.

Change in Prices Since the 2007 Market Rate Study

Note: Percentage changes quoted in this section are for the two-year period between 2007 and 2009. They are not percentage changes on an annual basis.

The 75th percentile prices increased between 2007 and 2009 for 19 of the 24 market segments (cells). Overall, there has been a 6% increase in prices since 2007 (averaging the changes in prices of all 24 cells). In those market segments for which the price increased since the 2007 study, the increase ranged from 3% to 17%. In two of the market segments prices remained the same as in 2007; in three prices actually decreased.

The preschool-age category had the greatest average price increase for both centers and family child care (11% for centers and 9% for FCC). It is interesting to note that school-age care also had the greatest average increase in price for centers (11%) but actually had a decrease in the overall average price for family child care.

Center Change in Prices

For center care, overall there has been a 7% average increase in price at the 75th percentile since the 2007 study (averaging the change in all 12 center cells). Kent County had an overall 11% average increase for center care, Sussex County had an overall 8% average increase, and New Castle County had an overall 4% average increase.

In all there was an increase in 10 of the 12 market segments. For one market segment the price at the 75th percentile remained the same as in 2007 (Sussex school age). For one market segment, the 75th percentile price decreased slightly (New Castle toddlers: – 2%). At the 75th percentile, the 2009 range of price changes for center care is: -2% (NC toddlers) to 17% (Kent school-age and Sussex preschool). Thus these two cells (Kent SA and Sussex PS) had the largest price increases among the 12 center cells. The smallest increase was for New Castle preschool (3%).

School-age and preschool had the largest overall average age-category increase in the center market (11%), toddlers had an overall average increase of 6%, and infants had an overall average increase of 5%.

FCC Change in Prices

For FCC care, overall there was a 5% average increase in prices at the 75th percentile since 2007 (averaging the change in all 12 FCC cells). Sussex County had the largest overall increase for family child care among the three counties (7%), averaging the changes in prices at the 75th percentile in infant, toddler, preschool and school-age care. New Castle had an overall average increase of 6% and Kent had an overall average increase of 2%.

In all there was an increase in 9 of the 12 FCC market segments. The largest increase in the 75th percentile price among the 12 cells was for Sussex preschool (15%). The cells with the smallest increase were Kent preschool (4%) and Kent toddlers (4%).

Preschool had the largest overall average age-category increase in the FCC market (9%); infants and toddlers had a 5% overall average increase. School-age actually had an overall average decrease in price since the 2007 study: the Sussex school-age price change was – 6%; Kent school-age was –2%. Only the New Castle school-age price increased since the 2007 study (7%).

Observation: It is interesting to note that the average overall price increase between 2007 and 2009 is 6% while the average overall price increase between 2005 and 2007 was 11%.

GENERAL FINDINGS OF THE 2009 STUDY

- The daily market prices for full time care at the 75th percentile range from $23 to $47; part-day school-age prices range from $10 to $20.95.

- At the 75th percentile, the daily market prices for full-time family child care range from $23 to $32.

- At the 75th percentile, the daily market prices for full-time center care range from $27 to $47.

- Prices in center care are higher than prices in FCC in all 12 market segments.

- Full-time prices are generally highest for infant care and lowest for preschool care. (Only part-day school-age prices were reported.)

- At the 75th percentile, prices in New Castle County are significantly higher than prices in Sussex County and Kent County.

- The 75th percentile price for FCC odd-hour care for New Castle is $9/hour. For Kent/Sussex it is $9.50/hour.

- In all, 24% of the providers interviewed were serving a child or children with special-needs. The majority reported that there were no additional costs to their program to serve these children.

- 2009 prices at the 75th percentile were higher than 2007 prices at the 75th percentile for 19 of the 24 market segments. The overall average increase in price since the 2007 study was 6% (averaging the change in all 24 cells). For center care, Kent County had the largest overall average price increase (11%); Sussex County had the largest overall average price increase (7%) for FCC.

SYNOPSIS OF RESULTS

- Prices are generally higher for center care, for younger children, and in New Castle County. Prices are generally lower for family child care, for older children, and in Sussex and Kent counties.

Detailed Findings (Tables A, B, C)

Tables A, B and C below provide detailed information regarding full-time infant, toddler and preschool daily prices and part-day prices for school-age care. The tables contain, for each cell: 1.) cell definition; 2.) population size N, estimated population of providers of this type of care; 3.) n, number of private-price observations utilized to develop the percentiles; 4.) the maximum price reported for the cell; 5.) the minimum price reported for the cell; 5.) the 75^{th} percentile prices (75% ile).

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Table A. Family Child Care - 75%ile Prices

County	N	n	Max	Min	**75%ile**
Kent, ITP	**	176	37.50	15.00	25.00
NC, ITP	**	386	50.00	11.00	30.00
Sussex, ITP	**	236	32.00	10.00	25.00

Table B. Family Child Care by Age - 75%ile Prices

County	Type	N	n	Max	Min	**75%ile**
Kent & Sussex	INF	**	64	37.50	12.00	25.00
Kent	TOD	**	75	33.75	16.00	25.00
Kent	PS	**	72	33.75	15.00	25.00
Kent	SA	**	39	16.00	5.00	10.00
New Castle	INF	**	83	45.00	11.00	32.00
New Castle	TOD	**	161	50.00	18.00	31.38
New Castle	PS	**	142	41.25	16.00	30.00
New Castle	SA	**	77	50.00	2.00	15.00
Kent & Sussex	INF	**	64	37.50	12.00	25.00
Sussex	TOD	**	107	32.00	12.00	25.00
Sussex	PS	**	94	30.00	10.00	23.00
Sussex	SA	**	63	35.00	4.00	11.25

Table C. Child Care Centers - 75%ile Prices

County	Type	N	n	Max	Min	**75%ile**
Kent	INF	26	20	49.00	22.00	32.00
Kent	TOD	36	32	49.00	20.00	29.00
Kent	PS	57	32	35.00	19.00	28.00
Kent	SA	46	22	21.00	4.75	14.00
New Castle	INF	117	72	72.22	20.00	47.00
New Castle	TOD	160	84	72.22	24.35	41.00
New Castle	PS	247	96	70.84	15.00	36.11
New Castle	SA	229	61	30.40	7.40	20.95
Sussex	INF	30	21	37.00	19.00	30.00
Sussex	TOD	38	23	32.00	19.00	28.25
Sussex	PS	56	27	30.00	17.00	27.00
Sussex	SA	51	20	20.00	8.00	13.00

Prices are daily, full time private-paying rates except for School Age (SA), which is part day (less than 4 hours per day.) ITP = Infant, Toddler and Preschool Child Care. INF = Infant Child Care, TOD = Toddler Child Care, PS = Preschool Child Care, SA = School-age Child Care. n = number of private-price observations utilized to develop the 75th percentiles. N = estimated population of providers of this type of care.
** Population size treated as unknown.