

**2013 Delaware Local Child Care Market Rate Study**

*Final Report*

*for*

*The Delaware Department of Health and Social Services,  
Division of Social Services*

Submitted by Workplace Solutions  
Reading, MA  
June 2013

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## ACKNOWLEDGMENT

The following individuals and groups are acknowledged for their assistance with this study: The Delaware Division of Social Services especially Elaine Archangelo, Director of The Division of Social Services, for her assistance and support especially in encouraging providers to participate in the study; Barbara McCaffery, Division Project Coordinator for the 2013 rate study who provided ongoing guidance throughout the project. We also thank Children and Families First, for assistance with the provider-sampling frame, and the Delaware Institute for Excellence in Early Childhood at the University of Delaware for assistance with communication to the provider community.

*This study would not have been possible without the gracious cooperation of the many Delaware child care providers who took the time to participate in the interview and help with the study. Thank you all.*

## GENERAL FINDINGS OF THE 2013 STUDY

- The participation rates for the study reflects the providers willingness to help with the rate survey: 97% of center and school-age providers, and 75% of family child care providers.
- The daily market prices for full time care at the 75<sup>th</sup> percentile range from \$24 to \$50.09; part-day school-age prices range from \$13 to \$20.
- At the 75<sup>th</sup> percentile, the daily market prices for full-time family child care range from \$24 to \$33.
- At the 75<sup>th</sup> percentile, the daily market prices for full-time center care range from \$28 to \$50.09.
- Prices in center care are higher than prices in FCC for all the market segment.
- Full-time prices are highest for infant care and lowest for preschool-age care. (Only part-day school-age prices were reported.)
- At the 75<sup>th</sup> percentiles, prices in New Castle County are notably higher than prices in Sussex County and Kent County.
- The 75<sup>th</sup> percentile FCC state-wide price for odd-hour care is \$10/hour.
- In all, 31% of the providers interviewed reported having a a child or children enrolled with special-needs. The vast majority of these providers reported that there were no additional costs to their program to serve these children.

- A majority of the providers interviewed (62%) had some or many children enrolled that were subsidized by Purchase of Care or Purchase of Care Plus.
- At the 75<sup>th</sup> percentile, the 2013 overall average increase in price since the 2011 study was 3% (averaging the change in all 24 cells).

## 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 County and in Kent County.

## OVERVIEW

The 2013 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 families.

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 eight previous child-care market rate studies for the Division, including the 2011 study, 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; William Horrace (Ph.D., Economics, MBA Finance), Professor of Economics, Syracuse University; Ann Witte (Ph.D., Economics), Professor Emeritus of Economics, Wellesley College; Christopher Parmeter, (Ph.D. Economics), Assistant Professor of Economics, University of Miami.

Project Manager Marie Sweeney worked closely with the Division's Project Coordinator 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 Division and Workplace Solutions planned the study during January and February. Interviews were conducted from March to May, over an eight-week period. The researchers submitted the final report to the Division in June.

The following section describes the methodology for the Market Rate Study. This includes a description of the sample design, the survey, and the interviews in the

field. The next section describes the findings of the survey including the range of prices at the 75<sup>th</sup> percentile, the response rates, and the accuracy of the estimates of the 75<sup>th</sup> percentile prices for each market segment. The section contains estimates of both prices *charged* by Delaware providers (provider prices) and prices *paid* by Delaware families (purchase prices). To discern price trends, the section compares 2013 prices with prices charged in 2011 as reported in the *2011 Local Child Care Market Rate Study* for the Delaware Department of Health and Human Services.

The final pages of the Executive Report (pg. 17) contains three tables presenting the 2013 percentile prices for the center and family child care markets. Table A contains the full-time daily prices at the 75<sup>th</sup> percentile for family child care for Kent, Sussex and New Castle counties. It also contains the minimum price reported in the county (Min), the maximum price reported in the county (Max), and the number of private-paying prices used to determine the 75<sup>th</sup> percentile (n). Table B contains the family child care full-time daily prices at the 75<sup>th</sup> percentile for infant, toddler, and preschool-age care as well as part-day prices for school-age care. Table C contains the center full-time daily prices at the 75<sup>th</sup> percentile for infant, toddler, and preschool-age care as well as part-day prices for school-age care. Finally, page 18 contains two bar charts of the 75<sup>th</sup> percentile prices for the 24 market segment in the study. This allows for an easy comparison of prices among the various market segments.

## METHODOLOGY

Workplace Solutions implemented the survey to obtain prices for private-paying children in care at the time of the study. The researchers selected a representative sample of providers throughout Delaware. These providers were subsequently interviewed by telephone. Utilizing the prices obtained from the interviews, researchers calculated the 75<sup>th</sup> percentiles of market prices for full-time infant, toddler, and preschool-age care and for part-day school-age care. Estimates of the statistical precision of the 75<sup>th</sup> percentiles of 2013 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 market 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 2013, merged with Children and Families First's data for licensed family child care and large family child care providers as of February 2013. The sampling frame for the center and school-age market consisted of Delaware's Office of Child Care Licensing's data for licensed center and licensed school-age providers as of February 2013 and the Departments' list of license-exempt providers, merged with Children and Families First's data of licensed center and licensed school-age providers as of February 2013. This comprehensive sampling frame allowed all listed providers in the state the opportunity to be selected for the rate study interview and greatly

reduced the likelihood that any publicly-available providers would be excluded from the survey.

As part of the development of the sampling frame, Workplace Solutions and Children and Families First reviewed the center and school-age providers to delete providers in categories that were outside the design of the study. These included providers that only served a niche in the child care market (occasional care), were not open to the general public (employer-supported programs only serving employees' children), were substantially subsidized by the federal government (Head Start), or did not provide child-care services for the required timeframe (nursery schools). After eliminating these programs from the lists used, the consultants then determined that the total number of providers eligible for the study (the sampling frame) was 1226 providers. This sampling frame included 322 licensed and license-exempt center and school-age providers and 904 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 providers in order to collect child-care prices for various market segments in Delaware. The researchers planned the sample to equalize the accuracy with which the market percentiles were estimated for the center and for the family child care market segments.

The 2013 sample design built upon the design and results of Delaware's 2011 *Local Child Care Market Rate Study*. The 2011 sampling plan targeted all providers in the state that qualified for the study, and called for sampling 45% of these providers. During this 2013 design phase, the researchers determined that the center sample would need to be increased to 50% of the center sampling frame in order to attain a high level of accuracy of the estimated 75<sup>th</sup> percentile of prices. The economists designed the sample for full-time care for centers and family child-care providers and for part-day care for school-age providers. The sample was segmented by:

- geographical region (3)
- type of care (2)
- age categories (4)

*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 age and school age. Therefore, based on three regions, two types of care and four age categories, there would be 24 market segments in the final analysis.

## 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 568 providers: 407 family child-care providers and 161 center and school-age providers. Below is listed the number of providers selected for the sample, by type of care and county.

<u>FCC</u>		<u>Center/School Age</u>	
Sussex	126	Sussex	34
Kent	121	Kent	30
New Castle	160	New Castle	97
<b>TOTAL:</b>	<b>407</b>	<b>TOTAL:</b>	<b>161</b>

The sample contained a wide range of providers throughout the state. To be more specific, the sample 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, school-age programs located in elementary schools, 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 2011 (i.e., infant care, odd-hour care).

## The Survey

The consultants utilized two surveys for the rate study: one for the center and school-age market and a second for the family child care and large family child care market. The surveys had been designed to collect comprehensive and accurate information about prices charged to private-paying families. Both surveys were designed to be easy for the providers yet enable the economists to address the complex pricing strategies of the Delaware provider community and the nuances of the market.

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 may not have a set rate by age category.

Thus, the FCC survey was designed to collect:

- A price & age 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. For this study, odd-hour care is evening care, overnight care and weekend care. Therefore the survey was designed to collect prices for odd-hour care for private-paying children as well as enrollment and cost information for children diagnosed with special-needs.

### **The Marketing Steps to Encourage Provider Participation**

During the planning phase of the project, the Division and Workplace Solutions planned and implemented various steps to encourage providers to participate in the study. These included written materials mailed to the providers and meetings held with providers to explain the forthcoming rate 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 in the study.
- A simple worksheet was included with the letter to help the providers prepare for the interview.
- The Delaware Institute for Excellence in Early Care at the University of Delaware included an article about the forthcoming rate survey in its spring edition of *Provider Pursuits*.
- The Division and Workplace Solutions planned and held Provider Information Sessions in two locations in the state. At these meetings Division Project Coordinator Barbara McCaffery and Workplace Solutions consultants 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 providers in the state to inform them of the forthcoming Information Sessions and to explain the child care rate study. The Division also included information about the rate study and the Information Sessions on its LISTSERV.

## **The Interviews**

A professional interview group Research America was selected to conduct interviews. This group had conducted interviews for previous Delaware Child Care Market Rate Studies. Workplace Solutions project manager also participated in the interviews. Interviews were conducted during the spring of 2013. 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 20 "call attempts" to reach the sample providers. In all, 836 providers were called for the rate survey interviews. This represents 68% of the providers in the 2013 Delaware sampling frame.

## **RESULTS**

The 2013 Delaware Local Child Care Market Rate Study results include: providers reporting 1663 prices for private-paying children in their care; a high provider participation rate and low refusal rate; and a high level of accuracy in the estimation of the 75<sup>th</sup> percentile prices.

### **The Participation and Response Rates**

*Participation rates:* The Survey obtained a 97% participation rate for the center and school-age providers and a 75% participation rate for the family child care providers. The rates represent the number of providers that agreed to participate in the survey when contacted. It includes the providers that qualified for the study and reported prices for private-paying children in their care. It also includes providers that agreed to participate but did not qualify for the study.

The Delaware participation rates show that the providers were very willing to participate in the study. These rates reflect the success of the Division's efforts to encourage provider participation in the rate survey and the gracious cooperation of Delaware's child care providers.

*Response rates:* The Survey obtained a 97% response rate for the center and school age providers and a 67% *response rate\** for the family child care providers. The response rate reflects the number of providers that agreed to participate in the survey when contacted and reported a price for a private-paying child or children enrolled in their program. The refusal rates for the study were quite low: 6% for the family child care sample providers and 2% for the center and

school-age sample providers. (\* Note: the sample size for the FCC providers was 407. In all 325 FCC providers reported private prices, which is 80% of the original sample size. The 67% response rate includes all of the sample and replacement providers that could not be reached. Some proportion of these providers would not have been eligible for the interview or would no longer be providing services.)

### **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 75<sup>th</sup> 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 the Executive Summary present summary findings for all 24 market segments in the study (See pg. 17: Tables A-C). The bar charts on pg. 18 present an overview of the prices at the 75<sup>th</sup> percentile. In all, the researchers submitted 10 tables of findings that are found at the end of the full report.

### **Accuracy of the Study**

The goal of the 2013 Delaware Local Child Care Market Rate Study was to Develop statistically credible information on the spring 2013 market prices charged by child care providers in the state. The Survey met this goal since the researchers used a statistically valid methodology and the 2013 market prices for Delaware child care providers were estimated with a verifiable and high degree of precision.

The estimates of precision presented are the 95% confidence interval for the 75th percentile of prices. For the infant, toddler and preschool-age 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. The 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. To increase the accuracy of infant prices for Kent and Sussex counties, the researchers combined the prices for the two counties into one K&S infant cell. These cells had also been combined in previous Delaware child care market rate studies. This improved the level of accuracy so that the accuracy for this market segment is now in line with the other full-time market segments. The Kent and Sussex center infant cells were also combined into one cell to improve their level of accuracy.

For school-age care, the 95% confidence interval is typically about plus or minus 6%-11% 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 centers, the Kent and Sussex school-age cells were combined into one K&S cell. This improved the level of accuracy for the center school-age prices at the 75th percentile in both Kent and Sussex counties.

For all of the market segments in the study, the level of accuracy achieved would be considered a more than acceptable high level of statistical precision. The researchers stress that it is important not just that a high degree of precision was attained, but also that the study quantified how high a degree of precision was attained.

### **Range of Prices**

Prices can vary widely in the state, by over 100% among different segments of the market. At the 75<sup>th</sup> percentile, results of the study reveal that the daily market prices for full-time care range from \$24 to \$50.09. Part-day school-age prices range from \$13 to \$20.

Child care prices are lower for family child care homes than for centers. For example, the 75<sup>th</sup> percentile of prices for full-time toddler care in Kent County is \$27 in family child care and \$31.75 in center care. The 75<sup>th</sup> percentile of prices for full-time preschool-age care in New Castle County is \$30.23 in family child care and \$42.29 in center care.

### **75<sup>th</sup> Percentile Prices by County**

Prices vary by geographic region in Delaware. For center and family child care, prices are higher in New Castle County than in Kent County and Sussex County. Prices at the 75<sup>th</sup> percentile are the same or similar for Kent and Sussex market segments. (Note: Kent and Sussex infant care have been combined for both the center and FCC markets. Kent and Sussex school-age care have also been combined for the center market.)

For *center care*, Sussex and Kent center prices are very similar. Sussex has the lowest priced toddler and preschool care at the 75<sup>th</sup> percentile; New Castle the highest priced care for all age categories. New Castle prices at the 75<sup>th</sup> percentile are notably higher: nearly 50% higher than the Sussex prices for preschool-age care and toddler care.

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

## **75<sup>th</sup> Percentile of Prices by Age of Children**

The 75<sup>th</sup> percentile prices for full-time care in centers decreases as the age of the child increases. For example, for center infant care in Kent, the 75<sup>th</sup> percentile price is \$36 per day while the 75<sup>th</sup> percentile price for preschool-age care is \$29.75 per day. This is also true for family child care: in Sussex County the 75<sup>th</sup> percentile price for infant care is \$29.25 per day and for preschool-age care is \$24 per day. The exception to this is family child care in New Castle for infant and toddler care. The 75<sup>th</sup> percentile price for both is \$33 per day.

### *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 225 prices for part-day school-age care from providers who had private-paying school-age children enrolled for less than four hours per day. At the 75<sup>th</sup> percentile, school-age care in centers is higher priced than in family child care homes. For example, the 75<sup>th</sup> percentile price in New Castle for part-day school-age care in centers is \$20/day and in FCC homes is \$15/day .

## **Family Child Care**

In all, 325 family child care providers reported 1193 prices for private-paying care for infant through school-age children. These providers reported 1062 prices for full-time care for infants, toddlers, and preschool-age children and 131 prices for part-day care for school-age children. At the 75<sup>th</sup> percentile, full-time FCC daily prices range from \$24 to \$33 depending on the age category and the county. Part-day school-age prices at the 75<sup>th</sup> percentile range from \$13 to \$15 for care for less than four hours per day.

## **Center Child Care**

In all, 156 child-care center and school-age providers participated in the rate study interviews and reported 452 prices for the care of private-paying children. These providers reported 358 prices for full-time care for infants, toddlers, and preschool-age children and 94 prices for part-day care for school-age children. Full-time daily prices at the 75<sup>th</sup> percentile range from \$28 to \$50.09, depending on the age category and the county. Part-day school-age prices at the 75<sup>th</sup> percentile range from \$14 to \$20 for care of less than four hours per day.

## **Prices Paid by Delaware's Families (Purchase Prices)**

The price 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. These

are the prices paid by Delaware families. To obtain these prices, the researchers weighted the 75<sup>th</sup> 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" or purchase prices and reflect all market transactions by private-paying families.

Overall, weighted prices (purchase prices) are higher than the provider prices (charged prices) by an average of 4%. This implies that Delaware families purchase more care from higher priced providers. For center care, weighted prices are higher than the provider prices by an average of 7%. As an example, the daily price at the 75<sup>th</sup> percentile *charged* by Sussex center providers for preschool-age care is \$28; weighted per private-paying children it is \$30. This \$30 represents the purchase price paid at the 75<sup>th</sup> percentile by Sussex parents purchasing preschool-age center care. For center care for all four age categories, the average purchase prices at the 75<sup>th</sup> percentile are higher than the average provider prices.

For FCC providers, the weighted or purchase prices are higher than the provider prices for 6 market segments, are the same for 5 market segments, and is lower for one market segment (Kent SA). On average, purchase prices among all 12 FCC cells are 2% higher than provider prices. For FCC infant, toddler and preschool-age categories, the average purchase price at the 75<sup>th</sup> percentile is higher than the average provider price. For school-age care, the purchase price and the provider price at the 75<sup>th</sup> percentile is the same for Sussex and New Castle counties. The Kent school-age purchase price is slightly lower than the provider price.

### **Odd-Hour Care**

FCC providers reported 27 prices for odd-hour care they had recently provided to private-paying children. For family child care, the 75<sup>th</sup> percentile state-wide price for odd-hour care is \$10/hour. There were insufficient center odd-hour prices reported to determine a 75<sup>th</sup> percentile price.

### **Special-Needs Care**

In all, 31% of providers interviewed indicated that they were serving a child or children in their program that had been diagnosed with special-needs. Of the center providers, 67% reported that they were serving a child or children with special needs. For family child care providers, only 14% reported that they were currently providing services to a child diagnosed with special needs.

In all, 77% of the providers in the study who had a child enrolled with special needs reported that there were no additional costs incurred to serve these children. Thus, the vast 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 that had been diagnosis with special needs. This is to determine if providers who do 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 to the prices charged by providers who had no children enrolled with special needs. Based on the analysis, it does not appear to be the case that Delaware providers that serve children diagnosed with special needs charge higher prices than other providers to offset any possible higher costs associated with serving children with special needs.

*Special needs findings:* Thus the vast 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 support the hypothesis that providers who had children enrolled with special needs were passing along possible higher costs to their total enrollment of children.

### **Change in Prices Since the 2011 Market Rate Study**

Note: Percentage changes quoted in this section are for the two-year period between 2011 and 2013. They are not percentage changes on an annual basis.

Overall, there has been a 3% increase in prices since 2011 (averaging the changes in prices of all 24 market segments). The infant-age category had the greatest overall average price increase (4%) of the four age categories. In addition, FCC infant care had the greatest average increase in price (8%) among all of the types of care/age categories.

#### *Center Change in Prices*

For center care there has been an overall 2% average increase in price at the 75<sup>th</sup> percentile since the 2011 study (averaging the change in all 12 center cells). New Castle toddler care and New Castle preschool-age care had the largest price increases among the 12 center cells (6%). The smallest increase was for New Castle infant care (1%).

#### *FCC Change in Prices*

Overall there was a 4% average increase in prices at the 75<sup>th</sup> percentile since 2011 (averaging the change in all 12 FCC cells). Kent/Sussex infant care\* had the largest price increases among the 12 FCC market segments (13%). The smallest increase was for New Castle toddler care and Kent preschool-age care (3%). (\*Kent/Sussex infant care is a combined cell.)

*Observation:* It is interesting to note that the overall average price increase among all the 24 market segments, between 2011 and 2013, is 3%. The overall average price increase between 2009 and 2011 for the 24 market segments was 5.6%. It is also noteworthy that there were fewer providers in the market in 2013 than in 2011. In reviewing the 2011 findings, there were fewer providers in the market in 2011 than in 2009.

### **The Impact of POC on the Child Care Market**

As part of the study, the survey asked providers to report the number of children enrolled at their site at the time of the interview. They were next asked if they had any children enrolled that were subsidized through Purchase of Care or Purchase of Care Plus. For those that replied “yes”, they were asked how many of their enrolled children were subsidized by either Purchase of Care or Purchase of Care Plus.

In reviewing the information provided by these questions, it becomes apparent that the state-subsidized program has a major impact on the child care market in Delaware. A majority of the providers interviewed (62%) had some or many children enrolled whom Purchase of Care or Purchase of Care Plus subsidized.

### **Detailed Findings (Tables A, B, C)**

Tables A, B and C below provide detailed information regarding full-time infant, toddler and preschool-age 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<sup>th</sup> percentile prices (75% ile).



## 2013 Delaware Local Child Care Market Rate Study

**Table A. Family Child Care - 75<sup>th</sup>ile Prices**

County	N	n	Max	Min	75 <sup>th</sup> ile
Kent, ITP	**	163	36.00	16.00	27.00
NC, ITP	**	262	40.00	13.00	33.00
Sussex, ITP	**	209	32.00	10.00	25.00

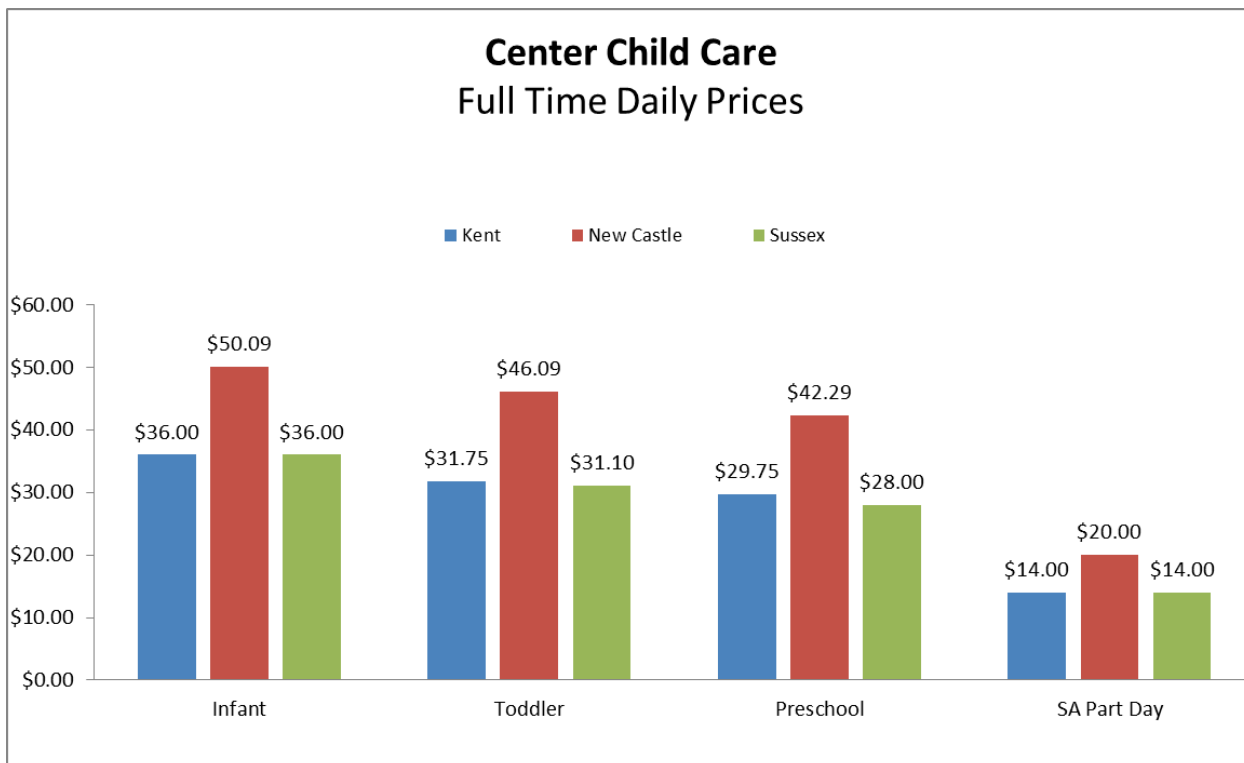
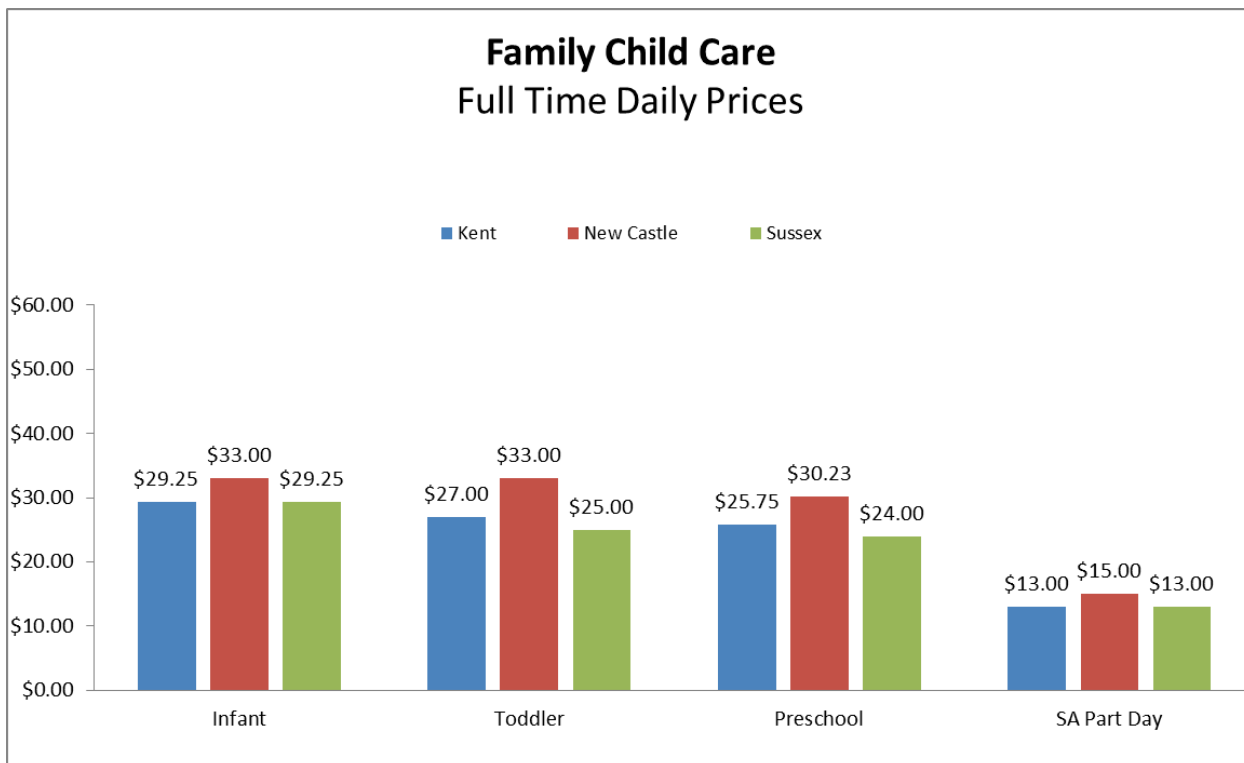
**Table B. Family Child Care by Age - 75<sup>th</sup>ile Prices**

County	Type	N	n	Max	Min	75 <sup>th</sup> ile
Kent & Sussex	INF	**	51	35.00	18.00	29.25
Kent	TOD	**	62	33.00	16.00	27.00
Kent	PS	**	69	36.00	16.00	25.75
Kent	SA	**	37	16.00	5.00	13.00
New Castle	INF	**	47	40.00	17.00	33.00
New Castle	TOD	**	103	40.00	13.00	33.00
New Castle	PS	**	112	40.00	13.00	30.23
New Castle	SA	**	52	30.00	5.00	15.00
Sussex & Kent	INF	**	51	35.00	18.00	29.25
Sussex	TOD	**	67	32.00	10.00	25.00
Sussex	PS	**	76	30.00	10.00	24.00
Sussex	SA	**	40	17.00	6.00	13.00

**Table C. Center Child Care - 75<sup>th</sup>ile Prices**

County	Type	N	n	Max	Min	75 <sup>th</sup> ile
Kent & Sussex	INF	59	36	45.60	25.00	36.00
Kent	TOD	42	25	41.00	21.00	31.75
Kent	PS	54	25	39.00	20.00	29.75
Kent & Sussex	SA	96	38	20.00	8.00	14.00
New Castle	INF	123	57	63.19	32.00	50.09
New Castle	TOD	154	78	60.42	28.00	46.09
New Castle	PS	195	85	53.81	24.00	42.29
New Castle	SA	161	56	27.00	7.58	20.00
Sussex & Kent	INF	59	36	45.60	25.00	36.00
Sussex	TOD	39	22	35.00	22.00	31.10
Sussex	PS	56	28	35.00	19.00	28.00
Sussex & Kent	SA	96	38	20.00	8.00	14.00

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-Age Care. INF = Infant Care, TOD = Toddler Care, PS = Preschool-Age Care, SA = School-Age Care. N = estimated population of providers of this type of care. \*\* Population size treated as unknown. n = number of private-prices utilized to develop the 75<sup>th</sup> percentiles. Max = maximum price reported. Min. = minimum price reported. 75<sup>th</sup>ile = 75th percentile price.



**2013 Delaware Local Child Care Market Rate Survey**

*Full Report*

*for*

*The Delaware Department of Health and Social Services,  
Division of Social Services*

Submitted by Workplace Solutions  
Reading, MA  
June 2013

## ACKNOWLEDGMENT

The study reported in this document was supported by a contract from the Delaware Division of Social Services (DSS). This does not indicate their concurrence with the results nor is the Division responsible in any way for the errors we may have made or the conclusions we have presented herein.

The following are individuals and groups we wish to acknowledge for their assistance with this study: The Delaware Division of Social Services especially Elaine Archangelo, Director of the Division of Social Services for her assistance and support especially in encouraging providers to participate in the survey; Barbara McCaffery, Division Project Coordinator for the Market Rate Survey, who provided ongoing guidance throughout the project. We also thank Children and Families First for assistance with the provider-sampling frame and the Delaware Institute for Excellence in Early Childhood at the University of Delaware for assistance with communication to the provider community.

*This study would not have been possible without the gracious cooperation of the many Delaware child care providers who took the time to participate in the interviews and help with the study. Thank you all.*

## PART 1: RESULTS OF THE STUDY

### GENERAL FINDINGS

- The vast majority of providers contacted for the study agreed to participate in the interview (79%). Few refused to participate in the study (5%).
- The daily market prices for full time care at the 75<sup>th</sup> percentile range from \$24 to \$50.09; part-day school-age prices range from \$13 to \$20.
- At the 75<sup>th</sup> percentile, the daily market prices for full-time family child care range from \$24 to \$33.
- At the 75<sup>th</sup> percentile, the daily market prices for full-time center care range from \$28 to \$50.09.
- At the 75<sup>th</sup> percentile, the daily market prices for part-day school-age care in family child care range from \$13 to \$15.
- At the 75<sup>th</sup> percentile, the daily market prices for part-day school-age care in center care range from \$14 to \$20.
- 75<sup>th</sup> percentile prices in center care are higher than 75<sup>th</sup> percentile prices in family child care in all market segments.
- Full-time prices are highest for infant care and lowest for preschool-age care. (Only part-day school-age prices were reported.)
- At the 75<sup>th</sup> percentile, prices in New Castle County are notably higher than prices in Sussex County and Kent County.
- The 75<sup>th</sup> percentile FCC state-wide price for odd-hour care is \$10/hour.
- In all, 31% of the providers interviewed reported having a child or children diagnosed with special-needs enrolled in their program. The majority of these providers (77%) reported that there were no additional costs to their program to serve these children.
- A majority of the providers interviewed (62%) had some or many children enrolled that were subsidized by Purchase of Care or Purchase of Care Plus. In addition, for 16% of the FCC sample, all of the children were subsidized.
- At the 75<sup>th</sup> percentile, the overall average price increase among the 24 market segments from 2011 to 2013 was 3%. This was determined by averaging the price changes for infant, toddler, preschool-age and school-age care for all three counties.

- New Castle County had the largest price increase overall for center care (4%) averaging the price changes for infant, toddler, preschool-age and school-age care.
- Kent County had the largest price increase overall for family child care (7%) averaging the price changes of infant, toddler, preschool-age and school-age care.
- The study attained a high degree of precision of the estimates, as well as a quantification of the precision of estimates that are in accord with standard statistical practice.

## 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 County and in Kent County.

## OVERVIEW

The goal of the 2013 Delaware Local Child Care Market Rate Survey was to develop statistically credible information of the present market prices charged by providers in Delaware and to provide confidence intervals that indicate the accuracy of the estimated percentiles. "Market prices" are prices providers charge parents for the care of private-paying children. They are prices charged by the providers to unrelated and unaffiliated parents that have not been reduced for special circumstances (e.g., low-income, employees children, etc.).

The Delaware Division of Social Services planned to utilize the information obtained from the survey to inform state decisions regarding reimbursement rates for child care services purchased by the state. Information from the study would help ensure that reimbursement rates allow subsidized low-income children equal access to early education and care. This survey complies with federal requirements of 45 Code of Federal Regulations for conducting a child care market rate survey (45 Code of Federal Regulations Sections 98 & 99, referring to "Equal Access").

The Delaware Division of Social Services (the Division) contracted with the consulting firm Workplace Solutions, located in Reading Massachusetts, to undertake this study. Workplace Solutions had conducted eight previous child care rate studies for the Division (from the 1996 market rate study to the 2011 market rate study), and has significant theoretical and field experience with these studies in Delaware and in other states. Workplace Solutions' consulting group consisted of a team of researchers including: Marie Sweeney (MBA, M.Ed.), Principal of Workplace Solutions; William Horrace (Ph.D., Economics, MBA Finance), Professor of Economics, Syracuse University; Ann Witte (Ph.D., Economics), Professor Emeritus of Economics, Wellesley College; Christopher

Parmeter (Ph.D., Economics), Assistant Professor of Economics, University of Miami.

Project Manager Marie Sweeney worked closely with the Division's Project Coordinator Barbara McCaffery to plan and implement the study. The need for accurate pricing information for policy purposes meant that the study had to be carefully planned and executed. The project began in January 2013. The Division and Workplace Solutions planned the study during January and February. Interviews were conducted from March to May. Workplace Solutions submitted the final estimates of the 75<sup>th</sup> percentile prices to the Division in June 2013.

The outline of the report follows. The following section describes the findings of the survey including: estimates of the 75<sup>th</sup> percentiles of prices by age group and county; full-time and part-day prices; family child care and center prices; provider and purchase prices; odd-hour care and care for children with special needs.

The final 75<sup>th</sup> percentile price estimates are included in 10 tables (see pages 41-47). The final tables present: (1) the 75<sup>th</sup> percentiles of prices, including comparisons of the distribution of prices charged by providers ("provider prices"), (2) the distribution of prices paid by Delaware families ("weighted" or purchase prices), and (3) a study of the costs and prices associated with the care of children with special needs. This section also provides the estimates of the accuracy of the 75<sup>th</sup> percentiles of prices reported in the study.

The Appendix includes a description of the methodology used for the Market Rate Survey. This includes the development of the sample frame; a description of the sampling plan, the sample selection and the survey; provider marketing steps and the interviews conducted in the field. It also includes a description of how the data were analyzed. The Appendix concludes with: (1) the Response Rates, Participation Rates, Refusal Rates and Obsolescence Rates; (2) the Sampling Design Report; (3) marketing materials used in communication to the provider community; (4) the Surveys.

The 2013 Delaware Child Care Market Rate Study results reflect: the 75<sup>th</sup> percentile of prices estimated with a high level of accuracy; a high provider participation rate (79%) and a low refusal rate (5%); and providers reporting 1663 prices for private-paying children currently in care.

### **Prices Throughout the State**

Pages 41-47 contain 10 tables presenting the results of the 2013 Child Care Market Rate Study. Table 1, 2, and 3 report the 75<sup>th</sup> percentile prices for the full-time daily rates for infant, toddler and preschool-age center care and family child care throughout the state. These tables also report the 75<sup>th</sup> percentile prices for part-day school-age care for children throughout the state. Table 4 presents the 75<sup>th</sup> percentile for the FCC state-wide hourly rate for odd-hour care. These tables present a 95% confidence interval for provider prices that allow one to assess the

accuracy with which the 75<sup>th</sup> percentiles have been estimated. One can be 95% confident that the 75<sup>th</sup> percentile lies within these confidence intervals.

Tables 5 through 8 present the findings of the special-needs study. Tables 9 and 10 present the prices for the daily rates for center care and for family child care throughout the state, as well as the prices 'weighted' by the number of reported private-paying children in each age category. These are prices paid by private-paying families in Delaware and are considered to be *purchase prices*. They are different from the prices generally discussed in the report, which are the prices *charged* by the providers ('provider prices').

Tables 1, 2 and 3 contain, for each cell: 1.) cell definition; 2.) population size N, where known. N was unknown for family child care providers, and so it was taken to be infinity in equation (1) in the Sampling Design for the sampling variance. This is a conservative approach that yields wider confidence intervals than if N were known; 3.) n = number of price observations utilized to develop the percentiles; 4.) the maximum price reported for the cell; 5.) the minimum price reported for the cell; 6.) the sample 75th percentile price; 7.) the standard error of the sample 75th percentile price, from Sheather-Jones bandwidth choice rule and Epanechnikov kernel; 8.) kernel-based 95% confidence interval; 9.) nonparametric 95% confidence interval, based on the hypergeometric distribution when N is known, and on the binomial distribution when N is not known. The researchers recommend that the parametric (kernel-based) confidence intervals be used when the sample size (n) is greater than or equal to 40 and that the nonparametric intervals be used when the sample size is less than 40.

### **Full-Time Care**

"Full time" care in this study refers to a daily price for a full week, 30 hours or more per week and at least 6 hours per day. Daily prices for full-time care at the 75th percentile are reported for center child care and family child care for infant, toddler and preschool-age children. The study obtained 1420 full-time prices used to calculate the 75<sup>th</sup> percentile prices. The range of prices reported by the Delaware providers for full-time care is \$10.00/day to \$63.19/day.

### **Part-Day Care**

"Part-day" care for this study refers to care for *less than 4 hours per day* for school-age children. This can be for 'after-school' care or for 'before-school' care or for 'before & after-school' care. Part-day school-age prices at the 75<sup>th</sup> percentile are reported for center care and for family child care. The study obtained 225 part-day prices used to calculate the 75<sup>th</sup> percentiles of school-age prices. The range of part-day prices reported by the Delaware school-age providers is \$5.00 to \$30.00.



## The Range of 75<sup>th</sup> Percentile Prices

The 75th percentiles of prices, including confidence intervals and standard errors, are reported in Tables 1-10 of this report. At the 75th percentiles, results of the study reveal that the market price\* for full-time care range from \$24.00 per day to \$50.09 per day. *Thus, full-time prices can vary widely in the state, by over 100% among different segments of the market.* The 75<sup>th</sup> percentiles of prices for part-day school-age care range from \$13.00 to \$20.00. (\*Prices discussed in this section are unweighted provider prices. 'Weighted' or purchase prices are discussed later in the report.)

## The 75<sup>th</sup> Percentiles of Prices by Age of Child

The 75th percentile of daily market prices of full-time care in centers decreases as the age of the child increases. For example, for center infant care in Sussex, the 75<sup>th</sup> percentile price is \$36.00 per day, the toddler price is \$31.10 per day and the preschool-age price is \$28.00 per day. This is also true for family child care: in Kent County infant care is \$29.25 per day, toddler care is \$27.00 per day, and preschool-age care is \$25.75 per day. The exception to this is family child care in New Castle for infant and toddler care. Both are \$33 per day at the 75<sup>th</sup> percentile.

At the 75<sup>th</sup> percentile, for full-time center care and for full-time family child care, infant care is generally the highest priced care\*. (\*The exception is NC FCC infant and toddler care. Both are \$33 per day.)

### 75<sup>th</sup> Percentiles of Prices for Full-Time Center Care in New Castle County

Infant care	\$50.09 / day
Toddler care	\$46.09 / day
Preschool-age care	\$42.29 / day

### *School-age*

For this study, providers reported school-age prices only for *part-day* care for less than four hours per day. Since the reported prices for these children are for part-day care and for older children, they are the lowest priced care in the study.

At the 75<sup>th</sup> percentile, part-day school-age care in centers is higher priced than in family child care homes. For example, New Castle part-day school-age center care is \$20 compared to \$15 for part-day school-age family child care.

### Part-day School-age Care at the 75<sup>th</sup> Percentiles

	Family Child Care	Center Care
Kent	\$13.00	\$14.00
New Castle	\$15.00	\$20.00
Sussex	\$13.00	\$14.00

### The 75<sup>th</sup> Percentiles of Prices by County

Prices vary by geographic region in Delaware. For center and family child care, prices are higher for New Castle County and lower for Kent County and for Sussex County. Prices in New Castle are higher for all of the market segments (type of care and age categories). Prices at the 75<sup>th</sup> percentiles are very similar or the same for Kent and Sussex market segments. (Note: Kent and Sussex infant care have been combined for both the center and the FCC markets. Kent and Sussex school-age care have also been combined for the center market.)

For *center care*, the Sussex and Kent center prices are very similar. Sussex County has the lowest priced toddler and preschool-age care at the 75<sup>th</sup> percentile. New Castle prices are notably higher, nearly 50% higher than Sussex prices for preschool-age care and toddler care.

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

For family child care there is approximately a 38% price difference for full-time care between the lowest priced FCC full-time care at the 75<sup>th</sup> percentile (\$24) and New Castle's highest priced full-time care (\$33) at the 75<sup>th</sup> percentile. For center care, there is approximately a 79% price difference for full-time care between the lowest priced full-time care at the 75<sup>th</sup> percentile (\$28) and New Castle's highest priced full-time care at the 75<sup>th</sup> percentile (\$50.09).

<i>Selected 75<sup>th</sup> Percentiles of Prices Per County</i>			
	<i>Sussex</i>	<i>Kent</i>	<i>New Castle</i>
<b>Centers</b>			
Toddlers	31.10	31.75	46.09
Preschool	28.00	29.75	42.29
<b>FCC</b>			
	<i>Sussex</i>	<i>Kent</i>	<i>New Castle</i>
Toddlers	25.00	27.00	33.00
Preschool	24.00	25.75	30.23

### **Family Child Care Prices**

In all, 325 family child-care providers quoted prices for private-paying children in their care. The family child care providers reported 1193 prices for private-paying children. This includes 1062 prices for full-time care and 131 prices for part-day school-age care. Thus 40% of the FCC respondents provided care for at least one private-paying school-age child at the time of the interview.

Generally the FCC respondents reported prices for three private-paying children that were attending their program full time (average). For FCC providers who were serving private-paying school-age children, they generally had two school-age children enrolled part day (average). The median number of private-paying children enrolled was 6 (full-time and part day).

The vast majority of the prices reported were weekly rates. FCC providers also quoted hourly prices, daily prices, and monthly prices. The researchers used the 1193 prices for development of the 75<sup>th</sup> percentiles of prices. In order to obtain these prices, all of the sample providers and many of the back-up replacement sample providers were called by the interviewers. In all, 661 FCC sample and replacement-sample providers were called for the rate study interview. This is 73% of the FCC sampling frame. The range of full-time daily prices reported by these providers was \$10.00 to \$40.00. The range of part-day school-age prices was \$5.00 to \$30.00.

The 75<sup>th</sup> percentile full-time price for Kent County for *combined* infant, toddler and preschool-age care (ITP) is \$27.00/day. For Sussex County it is \$25.00 for

combined infant, toddler and preschool age care (ITP). For New Castle it is \$33.00/day. The 75<sup>th</sup> percentiles of prices are also reported for full-time family child care by age groupings for each county. At the 75<sup>th</sup> percentiles, FCC full-time daily prices by age category range from \$24.00 to \$33.00. Part-day school-age care at the 75<sup>th</sup> percentile range from \$13.00 to \$15.00.

To improve the level of accuracy of infant care at the 75<sup>th</sup> percentile for Kent and Sussex counties, these cells were combined into one K&S infant care cell (\$29.25/day). For full-time infant care, the 75<sup>th</sup> percentile prices range from \$29.25/day to \$33.00/day, depending upon the county. For full-time toddler care, the 75<sup>th</sup> percentile prices range from \$25.00 to \$33.00. For full-time preschool-age care, the 75<sup>th</sup> percentile prices range from \$24.00 to \$30.23.

In general, infant care is the highest priced full-time care and preschool-age care is the lowest priced full-time care. New Castle County has the highest priced care for all age categories.

### **Center Child Care Prices**

In all, 156 child-care center and school-age providers participated in the rate study and reported 452 prices for private-paying children in their care. These providers reported prices for full-time care for infants, toddlers, and preschool-age children, as well as part-day school-age care. In all, they reported 94 infant prices, 125 toddler prices, 139 preschool-age prices and 94 school-age prices.

They generally reported prices for 38 private-paying children enrolled full-time (average). For Sussex County, they reported prices for 30 private-paying children enrolled full time (average). New Castle County averaged 42 and Kent County averaged of 34 private-paying children enrolled full time. For those with school-age children enrolled, they generally reported a price for 12 private-paying school-age children enrolled part-day (average).

The vast majority of these prices were quoted as weekly rates. Center providers also quoted hourly rates, daily rates, and monthly rates. The range of full-time daily prices reported by these providers is \$19 to \$63.19. The range of reported part-day school-age prices is \$7.58 to \$27.

*Rates at the 75<sup>th</sup> Percentile:* The 75<sup>th</sup> percentiles of prices are reported for center care by age category for each county in Delaware. Full-time daily prices at the 75<sup>th</sup> percentiles range from \$28.00 to \$50.09, depending on the age category and the county. Thus the range in price for full-time center care is much greater than the range in price for full-time FCC homes. Part-day school-age prices at the 75<sup>th</sup> percentile range from \$14.00 to \$20.00, depending upon the county.

For full-time center care, the 75<sup>th</sup> percentiles for the daily-market prices for infant care range from \$36.00 to \$50.09. For full-time toddler care, the daily prices at the 75<sup>th</sup> percentiles range from \$31.10 to \$46.09. For full-time preschool-age care, the daily prices at the 75<sup>th</sup> percentiles range from \$28.00 to \$42.29. For

part-day school-age care, the daily prices at the 75th percentiles range from \$14.00 to \$20.00. New Castle County has the highest priced care at the 75th percentiles for all age categories.

### The 75<sup>th</sup> Percentiles of Prices and Types of Care

At the 75<sup>th</sup> percentiles, the price of care is lower for family child care than for center care for all age categories for each county (see below). For some county / age-categories there is a relatively small price difference (Kent and Sussex school-age: FCC is \$13/day, center care is \$14/day.) For other county / age categories the price difference is greater between family child care and center care (New Castle infants: FCC \$33/day, center \$50.09/day).

#### *2013 Daily Rates at the 75th Percentiles*

	<i>Centers</i>	<i>FCC</i>
Infant		
Kent	\$36.00	\$29.25
Sussex	\$36.00	\$29.25
New Castle	\$50.09	\$33.00
Toddler		
Kent	\$31.75	\$27.00
Sussex	\$31.10	\$25.00
New Castle	\$46.09	\$33.00
Preschool age		
Kent	\$29.75	\$25.75
Sussex	\$28.00	\$24.00
New Castle	\$42.29	\$30.23
School age**		
Kent	\$14.00	\$13.00
Sussex	\$14.00	\$13.00
New Castle	\$20.00	\$15.00

\*\* part-day

Comparing the FCC results with the center results, it is apparent that the prices for family child care are lower and less variable than prices for center care. The greatest overall difference between FCC prices and center prices at the 75<sup>th</sup> percentiles occurs in New Castle County. The range in New Castle County price differences, between FCC prices and center prices, is 33% to 52% depending

upon the age category. In reviewing the price differences for all of the counties, infant care has the greatest overall *age-category* price difference between family child care and center care prices.

### **Prices Paid by Delaware's Families (Purchase Prices)**

The Delaware 2013 Local Child Care Market Rate Study provides a snapshot of what providers are *charging* at the 75<sup>th</sup> percentiles and the price at which parents are *purchasing* their child care services. The Division and Workplace Solutions determined that 'weighted' prices would reflect actual child care *purchases* being made by families in Delaware. To obtain these prices, the researchers weighted the 75<sup>th</sup> percentile prices by the number of private-paying children reported for each age category. These prices are referred to as 'weighted' prices and reflect market all transactions by private-paying parents.

Up to this point, the prices generally discussed in this report have been prices *charged* by the providers for the private-paying children in their care. Weighted prices are reported separately. Throughout this study, Workplace Solutions planned and implemented the research methodology to estimate provider prices and weighted prices. This report concentrates on the standard 75<sup>th</sup> percentiles of provider prices, but also presents the estimates of the 75<sup>th</sup> percentiles of weighted prices. All prices referenced in this report are provider prices unless specified as 'weighted' prices or 'purchase' prices.

#### *Calculation of Provider Prices*

To calculate the 'provider' price, consider an example of full-time infant care in centers. Each center respondent who has at least one full-time private-paying infant enrolled reports their rate for full-time private-paying infants. Thus any sample provider who has any number of private-paying infants enrolled full-time reports one full-time infant rate. All of the respondent providers who report a price for this infant care have their price counted once in determining the infant 75<sup>th</sup> percentile 'provider' price (the price *charged*). A provider with two private-paying infants enrolled full time is given as much emphasis as a provider with 14 private-paying infants enrolled full time. Each of these providers has their full-time infant rate counted once in determining the 75<sup>th</sup> percentile (provider) price, since the researchers are determining what a provider is *charging*.

#### *Calculation of Weighted Prices (Purchase Prices)*

Another way to look at prices it is to *weight* 'provider price' by the number of private-paying infants enrolled at the time of the interview. So, to determine the weighted prices, a provider with two private-paying infants enrolled full time actually has their price for this infant care counted twice (weighted by their number of private-paying infants enrolled full time) and a provider who has 14 private-paying infants enrolled full time has their price counted 14 times (weighted by their number of full-time private-paying infants). Using weighted

prices allows one to estimate the prices at which private-paying parents are actually *purchasing* the care. If the weighted prices are higher, this tells one that the private-paying parents are purchasing more care from the programs charging above the 75<sup>th</sup> percentile provider prices (more private-paying children are enrolled in the higher priced programs) and/or that the larger providers are charging above the 75<sup>th</sup> percentiles of provider prices.

*Purchase Prices for the 2013 Study*

Overall, the weighted or purchase prices are higher than provider prices by an average of 4% (averaging all 24 market segments in the study). The purchase prices for center care are higher than the provider prices for all 12 of the center market segments (infant, toddler, preschool-age care and school-age care in all three counties). As an example, the daily price at the 75<sup>th</sup> percentile charged by Kent center providers for toddler care is \$31.75; weighted by private-paying children it is \$33. For center care, these weighted / purchase prices are higher than the provider prices by an overall average of 7%. The price differences between provider and purchase prices range from 2% to 13% for center care. Infant and toddler care have the greatest price differences. Thus for center care, it may be that private-paying parents are selecting higher priced care for their children and/or that the larger programs are charging above the 75<sup>th</sup> percentiles of prices.

For FCC providers, the purchase prices are higher than the provider prices for six of the market segments, are the same for five, and is lower for one segment (Kent SA). The purchase prices are higher than the provider prices by an overall average of 2%. The price differences between provider and purchase prices range from - 2% to 9% for family child care. Preschool-age care has the greatest price differences between provider and purchase prices. (See Appendix: Tables 9 & 10 'Provider Prices' and 'Purchase' Prices).

<i>Selected 75<sup>th</sup> Percentiles of Provider Prices and Purchase Prices</i>		
	<i>Provider Prices</i>	<i>Purchase Prices</i>
<b>Centers</b>		
NC Toddlers	\$46.09	\$51.96
K School-age	\$14.00	\$15.00
<b>FCC</b>		
S Infants	\$29.25	\$30.00
K Preschool	\$25.75	\$26.00

### Odd-Hour Care

The Division requested that the researchers report 75th percentiles of prices for odd-hour care. Odd-hour care includes evening care, overnight care and weekend care, for example:

<b>Evening care:</b>	care during any evening hours, for example from 8 P.M. to 11 P.M.
<b>Overnight care:</b>	care for any overnight hours, for example 11 P.M. to 6 A.M.
<b>Weekend care</b>	Saturday care, Sunday care, or Saturday through Sunday care

As part of the survey, providers were asked if they had provided odd-hour care within the past month for any private-paying child and received a payment for that care. FCC providers reported 27 prices for various types of odd-hour care. The most frequently reported odd-hour care was evening care (18), then overnight care (8), then weekend care (1). This was not sufficient to allow for development of price percentiles for all three categories of odd-hour care. It also was not sufficient to allow for development of prices by county. Instead, the researchers developed a FCC state-wide 75<sup>th</sup> percentile of price for one category: "odd-hour" care. Since only three center providers reported offering odd-hour care, no odd-hour 75<sup>th</sup> percentile prices are reported for center / school-age care.

The state-wide 75<sup>th</sup> percentile of prices for FCC odd-hour care is \$10/hour. The range of odd-hour prices reported is \$2.00 per hour to \$20.00 per hour.

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#### *FCC ODD-HOUR CARE*

	<i>75th percentile</i>	<i>Range</i>
State-wide	\$10.00/hour	\$2.00-\$20.00/ hour

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### Care for Children with Special Needs

As part of the survey, providers were asked:

Are you presently serving any child with special needs in your program, private paying or state subsidized? For this survey,



"special needs" means a child from infancy through 18 years of age who is diagnosed with physical, emotional, or developmental needs requiring special care." [PROBE: "any" child with special needs can be private paying or state-subsidized child, and can be full time or part time."]

In all, 31% of providers interviewed indicated that they were serving a child or children with special-needs in their program. Of the center providers, 67% reported that they were serving a child or children diagnosed with special needs. For family child care providers, only 14% reported that they were currently providing services to a child diagnosed with special needs.

#### *Additional Costs of Serving Children with Special Needs*

The survey asked the providers about any *additional costs* for serving children that had been diagnosed with special needs. Because of the American's With Disabilities Act (ADA), providers in general cannot charge higher prices for children with special needs. Although providers could not charge higher prices, the Division wanted to know *if it actually costs the providers more to serve these children*. Providers who reported that they did have a child or children diagnosed with special needs in their program were asked:

*Are there any additional costs to you for serving this child or children with special needs? [PROBE: Does it cost you more to have the child or children diagnosed with special needs in your program than to have the other children in your program?]*

In all, 77% of the providers in the study who reported serving a child or children with special needs also reported that there were no additional costs incurred to serve these children. Of providers who answered this question, 87% of the FCC providers and 73% of the center / SA providers reported that there were no additional costs to serve children with special needs. Thus, the vast majority of providers who were serving children with special needs stated that there were no additional costs for them to serve these children.

A total of 21% (31) of providers who were serving children with special needs reported that there were additional costs to have these children in their program. The average additional cost they reported was 12% (Centers 14%, FCC 9%). Table 5 & 6 reports the breakdown of providers responding to these questions.

#### *Pricing Differential Analysis*

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 overall than providers who had no children enrolled with special needs. Because of the American's With Disabilities Act (ADA), providers in general cannot charge higher prices for children with special needs. They can, however, charge higher prices to all of the children enrolled to off-set any higher

costs for serving these children with special needs, or they can absorb the higher costs themselves if they do occur.

To determine this, the researchers compared the prices charged by providers who had children with special needs enrolled, in relation to the prices charged by providers who had no children enrolled with special needs. Therefore, the researchers sought to determine whether a *price differential* existed between the following two categories of providers:

Providers serving both children who had been diagnosed with special needs and children who had not been diagnosed with special needs. (SNC)

Providers who had no children enrolled that had been diagnosed with special needs (RC)

To determine if a statistically significant price difference existed between these two categories of providers, the researchers calculated the 75<sup>th</sup> percentile of prices, by cell, of these two groups (SNC, RC). If a statistically significant difference in price did exist, this would support the hypothesis that SNC providers were passing along (possible) additional costs for serving children with special needs to all of the children in their program. The researchers utilized the information collected from all of the providers to conduct this analysis.

In determining a pricing differential, the researchers were not only interested in calculating a price differential but also determining whether or not the reported differential was significantly different from zero (was the difference statistically significant). To do this, the researchers needed to derive 75th percentile prices, standard errors and confidence intervals for providers serving children with special needs (SNC) and for providers who had no children enrolled that had been diagnosed with special needs (RC). The prices provided the numerical basis for the differential while the standard errors allowed the consultants to consider if the differentials are meaningful in a statistical sense.

For the 2013 study, the researchers developed two sets of differentials: (1) one for full-time care (infant, toddler, and preschool care), and (2) one for part-day care (school-age care). The 75<sup>th</sup> percentiles of prices were reported for the following 22 cells: (1) Kent ITP (SNC) center, (2) Kent ITP (RC) center, (3) New Castle ITP (SNC) center, (4) New Castle ITP (RC) center, (5) Sussex ITP (SNC) center, (6) Sussex ITP (RC) center, (7) Kent & Sussex SA (SNC) center, (8) Kent & Sussex SA (RC) center, (9) New Castle SA (SNC) center, (10) New Castle SA (RC) center, (11) Kent ITP (SNC) family child care, (12) Kent ITP (RC) family child care, (13) New Castle ITP (SNC) family child care, (14) New Castle ITP (RC) family child care, (15) Sussex ITP (SNC) family child care, (16) Sussex ITP (RC) family child care, (17) Kent SA (SNC) family child care, (18) Kent SA (RC) family child care, (19) New Castle SA (SNC) family child care, (20) New Castle SA (RC) family child care, (21) Sussex SA (SNC) family child care, (22) Sussex SA (RC) family child care. (ITP = infant, toddler, and preschool full-time care; SA = part-day school-age care. SNC = providers serving a child / children diagnosed with

special needs as well as children who had not been diagnosed with special needs. RC = no children enrolled who had been diagnosed with special needs.)

### *Results of the Differential Analysis*

The results of this analysis are presented in Tables 7 and 8 (see pages 45-46). There is generally no statistically significant difference in prices between providers who serve children with special needs (SNC) and those who do not (RC). More specifically, the asymptotically normal test statistic indicates that the SNC differential is always statistically insignificant (95% level) except for New Castle County center ITP (infant, toddler, preschool) and SA (school-age).

When the economists compared the prices actually charged by providers that do and do not serve children with special needs, they found no clear pattern. In three of the cells providers that served children with special needs charged higher prices, in three they charged the same prices, and in five they charged lower prices. These differences were never large and were always insignificant except in two cases: New Castle centers, full time and school-age care. In these two cases, the New Castle providers with special needs children enrolled charged lower prices. Thus it does not appear to be the case that Delaware providers that serve children with special needs charge higher prices than other providers to offset any higher costs associated with serving children with special needs. It is not known whether providers absorb any higher costs themselves, although in the question to these providers about higher costs for serving these children, the vast majority stated that there were no higher costs for serving these children.

*Special needs findings:* Thus the vast 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 support the hypothesis that providers who had children enrolled with special needs were passing along possible higher costs to their total enrollment of children.

### **Change in Prices Since the 2011 Market Rate Study**

To discern price trends, 2013 prices are compared with prices charged in 2011 as reported in the *2011 Local Child Care Market Rate Study*. Note: Percentage changes quoted in this section are for the two-year period between 2011 and 2013. They are not percentage changes on an annual basis.

Overall, there has been a 3% increase in prices since 2011 (averaging the change in prices of all 24 market segments). In those market segments for which the prices increased since the 2011 study, the increase ranged from 1% to 13%. The infant-age category had the greatest overall average price increase (4%) of the four age categories.

### *Center Change in Prices*

For center care overall there has been a 2% average increase in price at the 75<sup>th</sup> percentile since the 2011 study (averaging the change in all 12 center cells). New Castle County had an overall 4% average increase in prices for center care, Sussex County had an overall 2% average increase, and Kent County had no average increase in price. New Castle toddler care and New Castle preschool-age care had the largest price increases among the 12 center cells (6%). The smallest increase was for New Castle infant care (1%).

### *FCC Change in Prices*

Overall there was a 4% average increase in prices at the 75<sup>th</sup> percentile since 2011 (averaging the change in all 12 FCC cells). Kent County had the largest overall increase for family child care among the three counties (7%), averaging the changes in prices at the 75<sup>th</sup> percentile in infant, toddler, preschool-age and school-age care. Sussex County had an overall average increase of 5%. New Castle County had a slight overall average price increase (.2%). Kent/Sussex infant care had the largest price increase among the 12 FCC cells (13%). The smallest increase was for New Castle toddler care and Kent preschool-age care (3%). (\*Kent and Sussex infant cells were combined into one cell.)

*Observation:* It is interesting to note that the overall average price increase among all the 24 market segments, between 2011 and 2013, is 3%. The overall average price increase between 2009 and 2011 for the 24 market segments was 5.6%. It is also noteworthy that there were fewer providers in the market in 2013 than in 2011. In reviewing the 2011 findings, there were fewer providers in the market in 2011 than in 2009.

### **The Impact of POC on the Child Care Market**

As part of the study, the survey asked providers to report the number of children enrolled at their site at the time of the interview. They were next asked if they had any children enrolled that were subsidized through Purchase of Care or Purchase of Care Plus. For those that replied “yes”, they were asked how many of their enrolled children were subsidized by either Purchase of Care or Purchase of Care Plus.

In reviewing the information provided by these questions, it becomes apparent that the state-subsidized program has a major impact on the child care market in Delaware. A majority of the providers interviewed (62%) had some or many children enrolled who were subsidized by Purchase of Care or Purchase of Care Plus. In addition, for 16% of the FCC sample, all of the children were subsidized. (Note: these providers were removed from the sample.)

*Centers:* The range of children enrolled at the sample site was 10 children to 260 children. The average enrollment was 82 children. In all, 88% of the center respondents had a subsidized child or children enrolled. Among providers that

had subsidized children enrolled, the range of subsidized children was 1 to 162 children. The median number of enrolled children in center programs was 70, the median number of subsidized children was 33 (47% of enrollment based on median number enrolled). The median number of subsidized children in center programs, by county, was: Kent (27), New Castle (39), and Sussex (20).

*Family Child Care:* The range of children enrolled by the FCC providers was 1 to 16. Almost half of the 325 FCC respondents (49%) had a subsidized child or children enrolled at the time of the interview. Among providers that had subsidized children enrolled, the range of subsidized children was 1 to 12. The median enrollment of the FCC providers was 6 children (full-time and part-day). For FCC provider with some number of subsidized children enrolled, the median number of subsidized children was 3; by county was: Kent (3), New Castle (3), and Sussex (4).

## **The Participation Rates and Response Rates**

### *Participation Rates*

The participation rate for the center providers was 97%; for FCC providers it was 75%. The overall participation rate for the study was 79%. These rates represent the number of providers that, when contacted for the interview, agreed to participate in the study. It includes providers that qualified for the study and reported prices for private-paying children in their care. It also includes providers that agreed to participate but did not qualify for the study (e.g., provider with all subsidized children, providers that served children for free, etc.). In all, 68% of the providers in the sampling frame were ultimately included in the final sample, as sample and replacement sample.

### *Response Rates*

A 97% response rate was obtained for the center/school-age interviews, a 67%\* was obtained for the FCC interviews. The overall response rate was 74%. The *response rate* is the percent of sample providers participating in the survey and reporting prices for private-paying children in their care. In all, 481 providers reported prices for private-paying children in their care. (\* Note: the sample size for the FCC providers was 407. In all 325 FCC providers reported private prices, which is 80% of the original sample size. The 67% response rate includes all of the sample and replacement providers that could not be reached. Some proportion of these providers that could not be reached would not have been eligible for the interview or would have closed their business.)

The Delaware participation rates and response rates show that the providers were very willing to participate in the study. These rates reflect the success of the Division's efforts to encourage provider participation in the rate survey and the gracious cooperation of the child care providers.

### *Refusal Rates and Obsolescence Rates*

The refusal rate for the study was quite low: 5%. In all, 6% of the family child care providers and 2% of the center / school-age providers refused to participate in the study. The *refusal rate* is the percent of sample providers that refused to participate in the survey when contacted, divided by the total number of eligible providers in the sample.

The obsolescence rate was 5% for the study. The FCC obsolescence rate was 6%, for the centers it was .6%. The obsolescence rate is the percent of providers that, when contacted for the survey, reported that they were no longer providing child care services.

### *Calculation of Response Rates*

The researchers determined the response rate by dividing the number of completed interviews by the total number of providers in the sample that had not been removed from the sample. Therefore, to determine the response rate, the number of providers that completed an interview and reported private prices was divided by the total number of providers with the following dispositions: completed interview, mid-interview terminate, refusal, busy, answering machine, no response. Providers with the following dispositions were not included in the denominator when determining the response rates since these providers were removed from the sample and replaced with back-up sample (if back up sample available): no longer in the child care business; all subsidized children; in an 'excluded' category of providers; no private-paying children enrolled for the required timeframes; disconnected phone; computer / fax tone; wrong number; duplicate; language problem; and privacy block on phone.

### **Accuracy of the Study**

The goal of the 2013 Local Child Care Market Rate Study was to develop statistically credible information on the 2013 market prices charged by child care providers in the state. The Rate Study met this goal since the researchers used a statistically valid methodology and the 2013 market prices for Delaware child care providers were estimated with a verifiable and high degree of precision.

The estimates of precision presented are the 95% confidence interval for the 75<sup>th</sup> percentile of prices. 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. The 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. To increase the accuracy of infant prices for Kent and Sussex counties, the researchers combined the prices for the two counties into one K&S infant cell. These cells had also been combined in previous Delaware child care market rate

studies. This improved the level of accuracy so that the accuracy for this market segment is now in line with the other full-time market segments. The Kent and Sussex center infant cells were also combined into one cell to improve their level of accuracy.

For school-age care, the 95% confidence interval is typically about plus or minus 6%-11% 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 centers, the Kent and Sussex school-age cells were combined into one K&S cell. This improved the level of accuracy for the center school-age prices at the 75<sup>th</sup> percentile in both Kent and Sussex counties.

For all of the market segments in the study, the level of accuracy achieved would be considered a more than acceptable high level of statistical precision. The researchers stress that it is not just a high degree of precision that was attained, but also that the study quantified how high a degree of precision was attained.

A second goal of the study set by Workplace Solutions was to equalize the standard errors of estimation across counties and age groups for full-time infant, toddler, preschool/part-day school-age care for centers, and to equalize the standard errors of estimation across counties for full-time infant family child-care (see *Sampling Plan Report* in Appendix). The standard errors actually achieved differed from those planned because price variability and response rates (expected yield rates) could not be predicted perfectly in advance. However, the standard errors actually achieved were generally quite close to those planned. The standard errors for both center care and for family child care reflect a high degree of accuracy in the estimation of price percentiles (see Tables 1-3 below).

## **75<sup>th</sup> Percentiles of Prices**



## Delaware 2013 Child Care Rate Study

**Table 1. Family Child Care Full-Time Daily Rates - 75%ile & Confidence Intervals**

							Parametric	Non-Parametric
Region	N	n	Max	Min	75%ile	Std Err	Conf. Int.	Conf. Int.
K, ITP	**	163	36.00	16.00	27.00	0.4039	[ 26.21, 27.79 ]	[ 26.00, 28.00 ]
NC, ITP	**	262	40.00	13.00	33.00	0.4634	[ 32.09, 33.91 ]	[ 32.00, 33.00 ]
S, ITP	**	209	32.00	10.00	25.00	0.3776	[ 24.26, 25.74 ]	[ 24.00, 25.00 ]

**Table 2. Family Child Care Daily Rates Per Age - 75%ile & Confidence Intervals**

								Parametric	Non-Parametric
Region	Type	N	n	Max	Min	75%ile	Std Err	Conf. Int.	Conf. Int.
K&S	INF	**	51	35.00	18.00	29.25	0.8527	[ 27.58, 30.92 ]	[ 28.00, 32.00 ]
K	TOD	**	62	33.00	16.00	27.00	0.5672	[ 25.89, 28.11 ]	[ 26.00, 29.00 ]
K	PS	**	69	36.00	16.00	25.75	0.3986	[ 24.97, 26.53 ]	[ 25.00, 28.00 ]
K	SA	**	37	16.00	5.00	13.00	0.7536	[ 11.52, 14.48 ]	[ 12.00, 15.00 ]
NC	INF	**	47	40.00	17.00	33.00	0.7382	[ 31.55, 34.45 ]	[ 32.40, 35.00 ]
NC	TOD	**	103	40.00	13.00	33.00	0.7227	[ 31.58, 34.42 ]	[ 31.00, 34.98 ]
NC	PS	**	112	40.00	13.00	30.23	0.5176	[ 29.22, 31.24 ]	[ 30.00, 33.00 ]
NC	SA	**	52	30.00	5.00	15.00	0.6972	[ 13.63, 16.37 ]	[ 15.00, 17.00 ]
S&K	INF	**	51	35.00	18.00	29.25	0.8527	[ 27.58, 30.92 ]	[ 28.00, 32.00 ]
S	TOD	**	67	32.00	10.00	25.00	0.6620	[ 23.70, 26.30 ]	[ 24.00, 27.00 ]
S	PS	**	76	30.00	10.00	24.00	0.6112	[ 22.80, 25.20 ]	[ 23.08, 26.00 ]
S	SA	**	40	17.00	6.00	13.00	0.5826	[ 11.86, 14.14 ]	[ 12.00, 15.00 ]

Prices are daily, full time rates except for School Age (SA) which is part-day care (less than 4 hours per day).

\*\* N = Population size treated as unknown. n = number of prices, based on the median price per age category. We recommend use of non-parametric confidence intervals for  $n < 40$ , and the use of the parametric confidence intervals based on standard errors for  $n \geq 40$ .

Tables contain only prices for private paying children (no Purchase of Care prices or Purchase of Care Plus prices).

K = Kent County, NC = New Castle County, S = Sussex County.

INF = Infant Child Care, TOD = Toddler Child Care, PS = Preschool-Age Child Care, SA = School-Age Child Care. ITP = Infant, Toddler, and Preschool-Age Child Care.

K&S, S&K: Kent & Sussex Infant cells are combined in Table 2 to improve their level of accuracy (standard errors). K ITP cell in Table 1 contains no S INF data, while in Table 2 K INF and S INF are combined. S ITP cell in Table 1 contains no K INF data, while in Table 2 S INF and K INF are combined.

75%ile = 75<sup>th</sup> Percentile

## Delaware 2013 Child Care Rate Study

**Table 3. Child Care Centers Daily Rates - 75%ile and Confidence Intervals**

								Parametric	Non-Parametric
Region	Type	N	n	Max	Min	75%ile	Std Err	Conf. Int.	Conf. Int.
K&S	I	59	36	45.60	25.00	36.00	0.7425	[ 34.54, 37.46 ]	[ 35.00, 39.00 ]
K	T	42	25	41.00	21.00	31.75	0.7087	[ 30.36, 33.14 ]	[ 31.00, 33.00 ]
K	PS	54	25	39.00	20.00	29.75	0.8815	[ 28.02, 31.48 ]	[ 28.00, 33.00 ]
K&S	SA	96	38	20.00	8.00	14.00	0.4566	[ 13.11, 14.89 ]	[ 13.50, 16.00 ]
NC	I	123	57	63.19	32.00	50.09	1.1684	[ 47.80, 52.38 ]	[ 49.40, 55.20 ]
NC	T	154	78	60.42	28.00	46.09	1.4381	[ 43.28, 48.91 ]	[ 43.88, 52.00 ]
NC	PS	195	85	53.81	24.00	42.29	1.5339	[ 39.28, 45.29 ]	[ 38.00, 45.17 ]
NC	SA	161	56	27.00	7.58	20.00	1.0797	[ 17.88, 22.12 ]	[ 18.20, 25.00 ]
S&K	I	59	36	45.60	25.00	36.00	0.7425	[ 34.54, 37.46 ]	[ 35.00, 39.00 ]
S	T	39	22	35.00	22.00	31.10	0.8488	[ 29.44, 32.76 ]	[ 30.00, 35.00 ]
S	PS	56	28	35.00	19.00	28.00	0.6588	[ 26.71, 29.29 ]	[ 27.00, 30.00 ]
S&K	SA	96	38	20.00	8.00	14.00	0.4566	[ 13.11, 14.89 ]	[ 13.50, 16.00 ]

Prices are daily, full time rates except for School Age (SA) which is part-day care (less than 4 hours per day).

Tables contain only prices for private paying children (no Purchase of Care prices or Purchase of Care Plus prices).

N = number of providers in the Delaware sampling frame providing this care

n = number of prices obtained from survey respondents.

We recommend the use of non-parametric confidence intervals for  $n < 40$ , and the use of the parametric confidence intervals based on standard errors for  $n \geq 40$ .

I = Infant Child Care, T = Toddler Child Care, PS = Preschool-Age Child Care, SA = School-Age Child Care.

K = Kent County, NC = New Castle County, S = Sussex County.

K&S, S&K: Kent & Sussex Infant and School age cells are combined in Table 3 to improve their level of accuracy (standard errors).

75%ile = 75<sup>th</sup> Percentile

## Delaware 2013 Child Care Rate Study

**Table 4. Family Child Care Odd-Hour Care Hourly Rates  
- 75%ile and Confidence Intervals**

							Parametric	Non-Parametric
Region	N	N	Max	Min	75%ile	Std Err	Conf. Int.	Conf. Int.
State	**	27	20.00	2.00	10.00	0.7079	[ 8.61, 11.39 ]	[ 5.33, 10.00 ]

Prices are for hourly rates

Table contains only prices for private-paying children (no Purchase of Care prices or Purchase of Care Plus prices).

\*\* N = Population size treated as unknown.

n = number of prices obtained from survey respondents.

We recommend use of non-parametric confidence intervals for  $n < 40$ , and the use of the parametric confidence intervals based on standard errors for  $n \geq 40$ .

There were insufficient center odd-hour care prices reported to determine a 75<sup>th</sup> percentile, so all observations are for odd-hour care reported by family child care providers.

State = Entire State of Delaware.

75%ile = 75<sup>th</sup> Percentile

## Delaware 2013 Child Care Rate Study

**Table 5. Centers, Special Needs Care, and Costs by County**

Cell	Number of Providers Responding To Survey Question	Number of SNC Providers	Are there any additional costs to you in caring for these children with SN?		Average Higher Cost of SNC (Estimated)
			No	Yes	
K, CTR	30	15 (50%)	11 (73%)	3 (20%)	7%
NC, CTR	92	66 (72%)	47 (71%)	18 (27%)	14%
S, CTR	32	22 (69%)	17 (77%)	5 (23%)	17%
Total, CTR	154	103 (67%)	75 (73%)	26 (25%)	14%

Cell	Number of Providers Responding To Survey Question	Number of SNC Providers	Are there any additional costs to you in caring for these children with SN?		Average Higher Cost of SNC (Estimated)
			No	Yes	
K, FCC	85	10 (12%)	9 (90%)	1 (10%)	5%
NC, FCC	147	22 (15%)	18 (82%)	3 (14%)	12%
S, FCC	93	15 (16%)	14 (93%)	1 (7%)	5%
Total, FCC	325	47 (14%)	41 (87%)	5 (11%)	9%

K = Kent County, NC = New Castle County, S = Sussex County.  
 FCC = Family Child Care, CTR = Center Child Care.

SNC = special needs care. SN = special needs

Special Needs Care (SNC) providers = Answered "yes" to serving children with special needs. Note: Some providers did not respond to the special needs questions.

Note: A small numbers of providers did not respond to the question "Are there any additional costs to you in caring for these children with SN (special needs)." Therefore, the sum of respondents answering "Yes" and "No" may not equal the entry in the "Number of SNC Providers" column in the tables.

Average Higher Cost of SNC (Estimated) = providers who reported serving children with special needs and who reported that it did cost their program more to serve these children. These providers then estimated their percentage of a higher cost for serving these children.

## Delaware 2013 Child Care Rate Study

**Table 7. Special Needs Care - 75%ile and Confidence Intervals**

Cell	Type	N	n	Max	Min	75%ile	Std Err	Parametric	Non-Parametric
								Conf. Int.	Conf. Int.
K, ITP, SNC	CTR	**	34	45.60	20.00	32.00	1.1738	[ 29.70, 34.30 ]	[ 30.00, 35.60 ]
K, ITP, RC	CTR	**	33	41.00	21.00	32.00	1.3122	[ 29.43, 34.57 ]	[ 30.00, 36.00 ]
NC, ITP, SNC	CTR	**	151	63.19	24.00	45.23	1.0926	[ 43.09, 47.37 ]	[ 43.80, 47.00 ]
NC, ITP, RC	CTR	**	66	59.20	24.45	49.20	1.6691	[ 45.93, 52.47 ]	[ 46.00, 53.80 ]
S, ITP, SNC	CTR	**	44	40.00	20.00	32.00	1.1246	[ 29.80, 34.20 ]	[ 30.00, 35.00 ]
S, ITP, RC	CTR	**	22	38.00	19.00	30.90	2.3512	[ 26.29, 35.51 ]	[ 28.00, 35.00 ]
K&S, SA, SNC	CTR	**	23	18.00	10.00	14.25	0.6051	[ 13.06, 15.44 ]	[ 13.50, 18.00 ]
K&S, SA, RC	CTR	**	15	20.00	8.00	13.20	1.2627	[ 10.73, 15.67 ]	[ 12.00, 20.00 ]
NC, SA, SNC	CTR	**	40	26.00	7.58	18.20	1.0033	[ 16.23, 20.17 ]	[ 17.00, 20.40 ]
NC, SA, RC	CTR	**	15	27.00	10.00	25.65	0.8879	[ 23.91, 27.39 ]	[ 24.40, 27.00 ]
K, ITP, SNC	FCC	**	14	36.00	19.00	26.00	0.9657	[ 24.11, 27.89 ]	[ 25.00, 36.00 ]
K, ITP, RC	FCC	**	149	35.00	16.00	27.00	0.4344	[ 26.15, 27.85 ]	[ 26.00, 28.00 ]
NC, ITP, SNC	FCC	**	42	40.00	20.00	33.99	1.5062	[ 31.04, 36.94 ]	[ 31.50, 40.00 ]
NC, ITP, RC	FCC	**	220	40.00	13.00	33.00	0.4968	[ 32.03, 33.97 ]	[ 30.23, 33.00 ]
S, ITP, SNC	FCC	**	25	32.00	19.00	24.75	0.9133	[ 22.96, 26.54 ]	[ 23.08, 32.00 ]
S, ITP, RC	FCC	**	137	33.00	10.00	25.00	0.3959	[ 24.22, 25.78 ]	[ 24.00, 26.00 ]
K, SA, SNC	FCC	**	6	15.00	8.00	13.00	1.8201	[ 9.43, 16.57 ]	[ 8.00, *** ]
K, SA, RC	FCC	**	31	16.00	5.00	13.00	0.8385	[ 11.36, 14.64 ]	[ 11.00, 15.00 ]
NC, SA, SNC	FCC	**	12	30.00	5.00	15.00	2.1423	[ 10.80, 19.20 ]	[ 10.00, *** ]
NC, SA, RC	FCC	**	40	30.00	5.00	15.00	0.7520	[ 13.53, 16.47 ]	[ 14.00, 17.00 ]
S, SA, SNC	FCC	**	6	13.00	9.00	12.00	0.7753	[ 10.48, 13.52 ]	[ 9.00, *** ]
S, SA, RC	FCC	**	34	17.00	6.00	13.50	0.7219	[ 12.90, 14.91 ]	[ 12.00, 15.00 ]

\*\* Population size treated as unknown.

\*\*\* Non-parametric upper bound undefined. 97.5% lower bound provided.

Prices are daily, full-time rates except for School-Age (SA) which is part-day care (less than 4 hours per day). Tables contain only prices for private-paying children (no Purchase of Care prices or Purchase of Care Plus prices).

K = Kent County, NC = New Castle County, S = Sussex County, SNC = Special Needs Care, RC = Regular Care, FCC = Family Child Care, CTR = Center Child Care. ITP = Infants, Toddlers, and Preschool-Age Child Care. SA = School-Age Child Care.

Special Needs Care program = Answered "yes" to having children with special needs enrolled. Regular Care program = Answered "no" to children with special needs enrolled.

We recommend use of non-parametric confidence intervals for  $n < 40$ , and the use of the parametric confidence intervals based on standard errors for  $n \geq 40$ .

Note: A small numbers of providers did not respond to the special needs questions. Therefore, the countywide totals here may not equal the countywide totals reported elsewhere in this report.

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**Table 8. Special Needs Care Differentials and Conversion Factors**

Cell Definition	SNC Differential	SNC Conversion Factor *	Statistically Significant? ***
K, ITP, CTR	0.00	1.0000	N
NC, ITP, CTR	-3.97	0.9193	Y
S, ITP, CTR	1.10	1.0356	N
K&S, SA, CTR	1.05	1.0795	N
NC, SA, CTR	-7.45	0.7096	Y
K, ITP, FCC	-1.00	0.9630	N
NC, ITP, FCC	0.99	1.0300	N
S, ITP, FCC	-0.25	0.9900	N
K, SA, FCC	0.00	1.0000	N
NC, SA, FCC	0.00	1.0000	N
S, SA, FCC	-1.50	0.8889	N

\* SNC differential is SNC price minus RC price. SNC conversion is SNC price divided by RC price. To convert RC prices to SNC prices, multiply RC price by the conversion factor. For example, if the RC 75<sup>th</sup>ile price in NC, ITP, FCC is \$33.00, then the SNC price is  $\$33.00 \times 1.0300 = \$33.99$ .

\*\*\* Asymptotically normal test statistics (95% level) indicate that the SNC differential was always insignificant except for Center Infant-Toddler-Preschool and School-Age Care in New Castle County.

K = Kent County, NC = New Castle County, S = Sussex County

SNC = Special Needs Care, RC = Regular Care

FCC = Family Child Care, CTR = Center Child Care

ITP = Infants, Toddlers, and Preschool-Age Child Care; SA = School-Age Child Care

Special Needs Care program = Answered "yes" to having children with special needs enrolled. Regular Care program = Answered "no" to children with special needs enrolled.

Note: Some providers did not respond to the special needs questions.

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**Table 9. Family Child Care - Per Provider and Weighted (Purchase)  
75%ile Prices**

		Provider Prices	Purchase Prices*
Region	Type	75%ile	75%ile
K&S	I	29.25	30.00
K	T	27.00	27.00
K	PS	25.75	26.00
K	SA	13.00	12.75
NC	I	33.00	33.25
NC	T	33.00	33.00
NC	PS	30.23	33.00
NC	SA	15.00	15.00
S&K	I	29.25	30.00
S	T	25.00	26.00
S	PS	24.00	24.00
S	SA	13.00	13.00

**Table 10. Child Care Centers - Per Provider and Weighted (Purchase)  
75%ile Prices**

		Provider Prices	Purchase Prices*
Region	Type	75%ile	75%ile
K&S	I	36.00	38.00
K	T	31.75	33.00
K	PS	29.75	30.40
K&S	SA	14.00	15.00
NC	I	50.09	55.60
NC	T	46.09	51.96
NC	PS	42.29	46.00
NC	SA	20.00	20.40
S&K	I	36.00	38.00
S	T	31.10	33.00
S	PS	28.00	30.00
S&K	SA	14.00	15.00

"Provider Prices" are prices that providers reported charging for the care of private-paying children enrolled at their site. \*"Purchase prices" weight the Provider Prices by the number of private-paying children actually in care.

Infant, toddler and preschool-age prices are for full-time care, for 30 hours or more per week and at least 6 hours per day. School-age prices are for part-day care, for less than 4 hours per day.

K&S; S&K = combined cells. 75%ile = 75<sup>th</sup> Percentile