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# Estimating Changes in the Supply and Demand for Child Care in Philadelphia

*Prepared by* **REINVESTMENT FUND**

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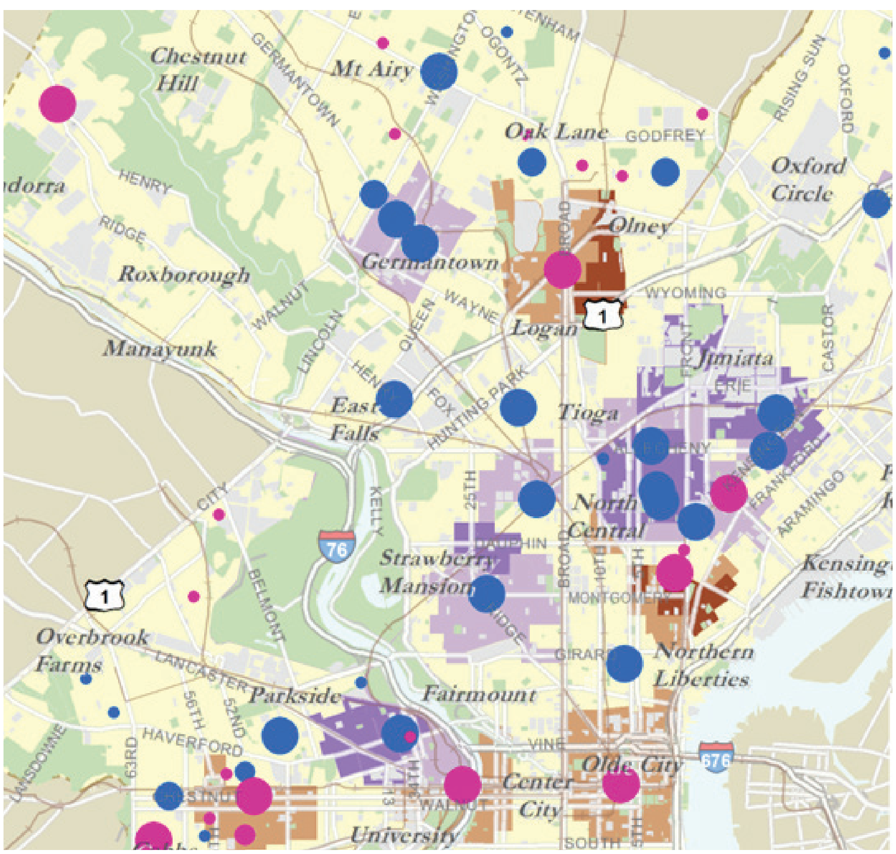



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## Estimating Changes in the Supply and Demand for Child Care in Philadelphia

In 2014, Reinvestment Fund analyzed the supply and demand for child care in Philadelphia and identified areas of the city where targeted investments could help address the shortage of high-quality child care. Now in the second year, we updated the original analysis to track changes over time in the supply, demand, and shortage of child care. To provide greater access to the research results, Reinvestment Fund created an interactive online tool, located at www.childcaremap.org. The tool identifies neighborhoods where high-quality child care is scarce in absolute and relative terms, while also giving funders, practitioners, and child care advocates better data on where resources and intervention are needed.

As was the case in 2014, no single data source can adequately model the supply and quality of child care; nor is there any single dataset which can project the demand for child care services. To estimate supply and demand, Reinvestment Fund uses statistically derived estimates built from multiple sources of data. The data sources, statistical and spatial methodologies used in this report are based on established methodology from the initial 2014 study, supported by and developed alongside the project's advisory group, which included local early childhood experts in Philadelphia.

Echoing the 2014 results, the 2015 update did not find a substantial gap between the total supply of child care and the demand for care across the city. However, while certain neighborhoods saw improvements in the provision of child care over the past year of study, a shortage of certified and high-quality child care options still exists in many areas of the city.

**Estimating the Supply of Child Care**

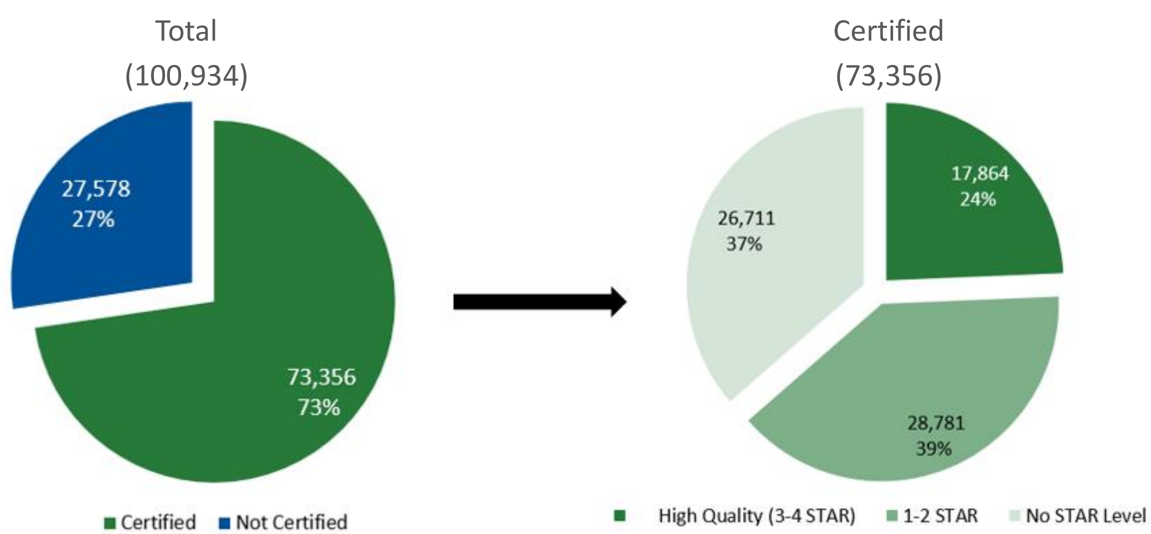
Across Philadelphia, Reinvestment Fund estimated that the total supply of child care remained relatively constant from 2014 to 2015, with a less than 1% growth in seats, totaling over 100,900 estimated seats in the city. Of those, slightly more than 73,000 seats are certified with the Office of Child Development and Early Learning (OCDEL). This represents a 3.1% increase in the share of certified seats from the past year. Of those certified, 17,800 (24%) are rated as being of high-quality, STAR 3 or STAR 4 according to OCDEL's Keystone STARS performance standards—a 3.5% increase in the share of certified seats from the year prior. Thirty-nine percent, or an estimated 28,700 certified seats have a lower quality rating (STAR 1 or STAR 2) and an estimated 26,700 (36%) do not have any quality rating. (See tables 1 & 2.)

| Estimated Supply of Childcare | Total Seats | % of All Seats | Change from 2014 # | % |
|---|---|---|---|---|
| Certified | 73,356 | 72.7% | 3,156 | 3.1% |
| High Quality (3-4 STAR) | 17,864 | 17.7% | 3,227 | 3.2% |
| 1-2 STAR | 28,781 | 28.5% | -2,353 | -2.4% |
| No STAR Level | 26,711 | 26.5% | 2,282 | 2.3% |
| Not Certified | 27,578 | 27.3% | -3,028 | -3.1% |
| **Total Seats** | **100,934** | | **128** | |

Table 1: Estimated Supply of Total Childcare

| Estimated Supply of Certified Childcare | Total Seats | Share of Certified Seats | Change in Share of Certified |
|---|---|---|---|
| High Quality (3-4 STAR) | 17,864 | 24.4% | 3.5% |
| 1-2 STAR | 28,781 | 39.2% | -5.2% |
| No STAR Level | 26,711 | 36.4% | 1.6% |
| **Total Certified Seats** | **73,356** | 100.0% | |

Table 2: Estimated Supply of Certified Childcare




These estimates are the maximum potential supply of child care seats, if every center enrolled at full capacity. Overall, the highest supply of child care is found to be close to major public transportation routes. We continue to see that the availability of certified, high-quality care is greater in areas with higher rates of poverty and lower incomes. On average, block groups where less than 10% of the population was African American had the lowest supply of certified, high-quality care. This is similar to the pattern observed in 2014.

**Estimating the Need for Child Care**

According to 2015 population projections from Nielsen, 105,800 children under the age of five live in Philadelphia. Using this baseline projection for demand, Reinvestment Fund analyzed data from a variety of sources about where people live and work, as well as household size, income and family composition to consider family travel patterns that may affect demand for child care. Analyses suggest that 9,200 resident children travel with adults to child care located outside of the city near a parent's place of work. In addition, we estimate that 16,400 children who live outside the city travel with parents to child care in the city. This yields a maximum potential demand for 113,000 child care seats in the city of Philadelphia.[1] This figure represents an increase in demand of 4.9% for child care seats since the 2014 childcare analysis. Note, this figure captures changes between 2010 Census and 2015 Nielsen projections of children aged 0-4, as well as changes in the number of workers in Philadelphia reflected in Census Longitudinal Employer-Household Dynamics (LEHD) data from 2010 to 2012.

When considering demand in the context of demographics and transportation, trends regarding demand remain consistent over time. Areas with lower median incomes and higher poverty rates are more likely to be in higher demand categories than less impoverished places. We find areas near train stops still tend to generate higher demand than areas farther away, as was the case in the 2014 study.

**Identifying Areas of Particular Child Care Needs**

After estimating the supply and demand for child care, the final step was to model places where shortages exist. Understanding the geographic distribution of shortages can help guide programmatic or investment activity to benefit areas of concern. Details of the methodology used to estimate the gap between supply and demand can be found in the original 2014 analysis, available at childcaremap.org.

*Shortage in total supply* – The total demand for child care in Philadelphia is greater than the total supply. Reinvestment Fund estimated an overall demand for approximately 113,000 slots in the city and a supply of approximately 100,900. Overall, this translated into a shortage across the city of 12,100 child care slots. Places where these shortages were highest in the 2014 analysis tended to be the same areas in the 2015 study, including in the major employment centers (Center City, University City, near Philadelphia International Airport), along the River Wards (Kensington and Port Richmond), and throughout Northeast Philadelphia.

As noted in 2014, areas with the largest shortages were not necessarily the poorest parts of the city, which typically have both high demand and high supply. This trend continued in the updated analysis.

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[1] We estimated that 33% of children of working parents in a given block group will seek child care services near their place of work. This estimate was informed by two studies, a report from the U.S. Census Bureau using the Survey of Income and Program Participation, and a report on the child care arrangements of working parents in Cook County Illinois.

Areas with the largest shortage were concentrated in the northeast part of the city around the Delaware River Wards and in parts of Southwest and South Philadelphia.

When examining changes over time, areas which had substantial declines in the shortage of total supply include Center City, Olney, and West Oak Lane. In contrast, the shortage of total supply grew in other areas, such as University City, Overbrook Farms, and parts of the far Northeast including sections of the Bustleton and Somerton neighborhoods.

*Shortage in certified supply* – The largest shortages in certified slots continue to be concentrated in Center City, University City, Mount Airy, and portions of the Northeast. We see a continued trend that block groups closest to train stations are still more likely to have shortages in certified child care slots.

Some areas saw an improvement in certified supply over the past year. These include the neighborhoods of Point Breeze, Overbrook Farms, and Port Richmond. While some neighborhoods improved, others saw their shortage of certified supply increase, including Pennsport, East Falls, and sections of North Philadelphia/Strawberry Mansion.

*Shortage in high-quality supply* – Areas with the largest shortages in high-quality child care slots remain similar to those areas with larger shortages in total supply, including Center City, University City, and sections of the Northeast. Because there are fewer high-quality child care slots overall, the shortage in high-quality care is greater than the overall shortage of child care in Philadelphia.

| **Factors that Contribute to Increasing or Decreasing Shortages in High-Quality Childcare Supply** | |
|---|---|
| Factors that ***increase*** **shortage in the supply of high-quality childcare…** | Factors that ***shrink*** **shortage in the supply of high-quality childcare…** |
| Operators *close* a high-quality center | Operators *open* a new high-quality center |
| A previously high performing center receives a *lower* rating | A previously low performing center receives a *higher* rating |
| An existing center *shrinks* to accepts fewer students | An existing center *expands* to accept more students |
| *More* parents work nearby and bring children to work with them | *Fewer* parents work nearby and bring children to work with them |
| New families *move in* to an area | Existing families *move out* of an area |

Although there remains a shortage of high-quality child care overall, certain areas saw a decline in the shortage of high-quality slots between 2014 and 2015. For instance, areas that saw a decrease in the shortage of high-quality child care include the Mantua neighborhood and parts of the Northeast, including Torresdale, Holmesburg, and Mayfair. It is also notable that the shortage of high-quality seats grew in a few areas from the 2014 analysis. These include Southwest Philadelphia, Bustleton, Olney, and Andorra neighborhoods.

To visualize changes in high-quality supply over time (2014 to 2015), Figure 1 displays areas with changes in high-quality supply as a thematic map layer (purple to brown scale) and also maps the location of high-quality suppliers with changes to their STAR 3 or STAR 4 rating since the 2014 study. More details describing the quantitative ranges of change in the high-quality supply, total supply, total demand, and the gaps between supply and demand can be found at Childcaremap.org.

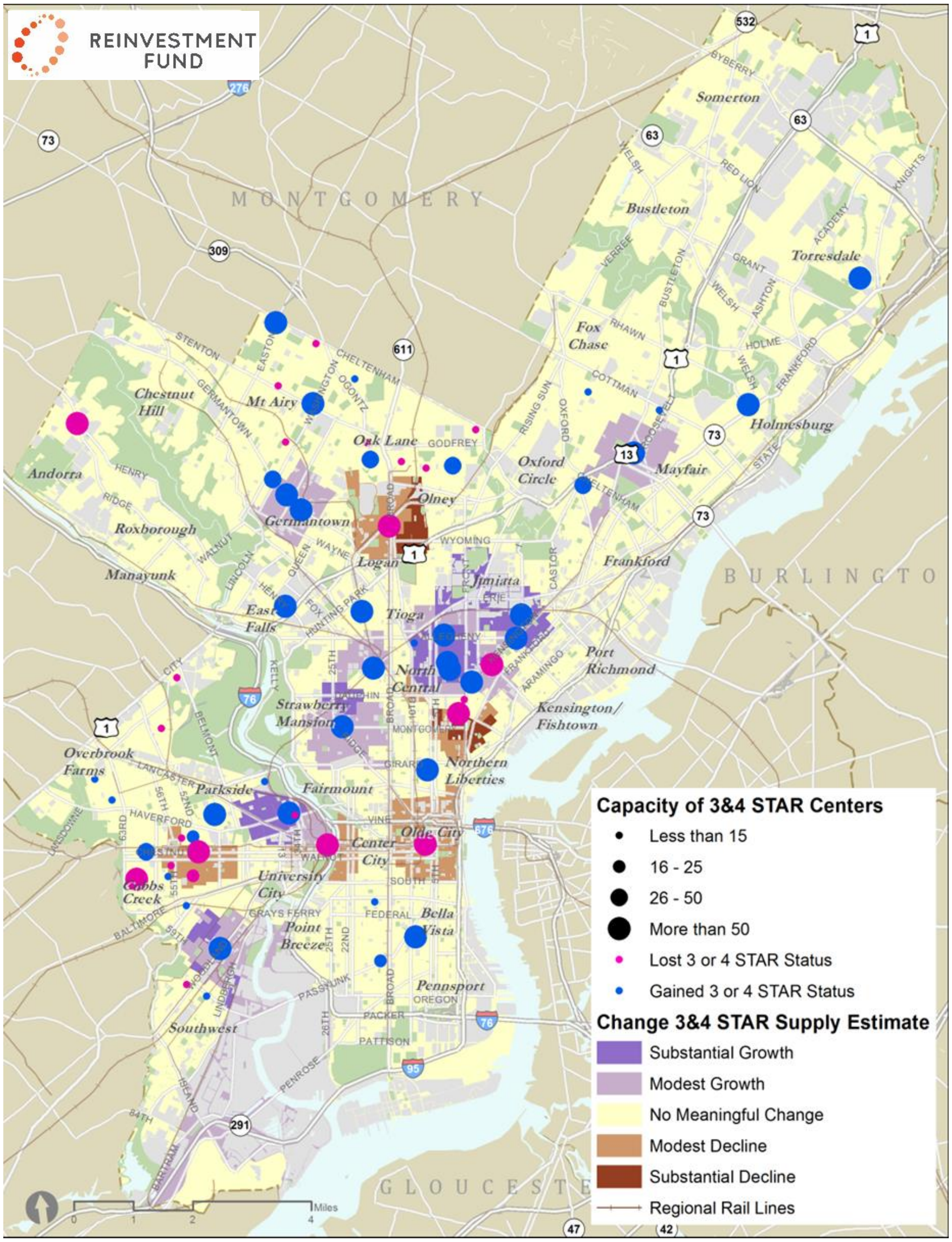


**Figure 1: Changes in Certified High-Quality (OCDEL) Child Care STAR 3 and STAR 4 Ratings with Changes in Supply Estimates for High-Quality Child Care (2014 to 2015)**

## Conclusions

The 2015 analysis updates the estimated supply, demand and shortage figures for child care in Philadelphia from Reinvestment Fund's initial 2014 analysis. With the accompanying portal at Childcaremap.org, this latest release builds on the baseline figures from the 2014 study and shows changes over the past year for supply and demand, as well as shortage, for neighborhoods throughout the city.

While the overall supply of child care across Philadelphia generally tracks with demand, various challenges and barriers still exist for neighborhoods and job centers looking to provide families with child care options, especially high-quality options. Changes over the past year demonstrate an uptick in the number of high-quality seats at a citywide level, but such changes were not uniform across all neighborhoods, with a few areas experiencing a decline in high-quality child care options.

The annual update to this analysis provides a longitudinal view of changes in the overall supply and demand in child care in Philadelphia, and allows for the ongoing use of evidence-based and data-driven planning for policymakers, investors and practitioners alike.

## Data Sources

Reinvestment Fund used the following data sources to approximate supply and demand.

| SUPPLY SOURCES | 2014 Analysis | 2015 Update |
|---|---|---|
| Pennsylvania Office of Child Development and Early Learning (OCDEL) | June 2013 | Dec 2014 |
| Philadelphia School District Head Start and Partner Sites | Sept 2013 | Nov 2014 |
| PA Department of Education (PDE) License and Enrollment data for Pre-K | June 2013 | Nov 2014 |
| National Establishment Time Series (NETS) | 2011 | 2012 |
| InfoUSA | 2012 | 2014 |

| DEMAND SOURCES | 2014 Analysis | 2015 Update |
|---|---|---|
| Pop. 0-4 | 2010 Census | Nielsen Population Estimates, 2015 |
| Adult Working Pop. | 2010 Census Longitudinal Employer Household Dynamics | 2012 Census Longitudinal Employer-Household Dynamics |
| Poverty & Demo. | 2011 Census American Community Survey (ACS) | 2013 Census American Community Survey (ACS) |

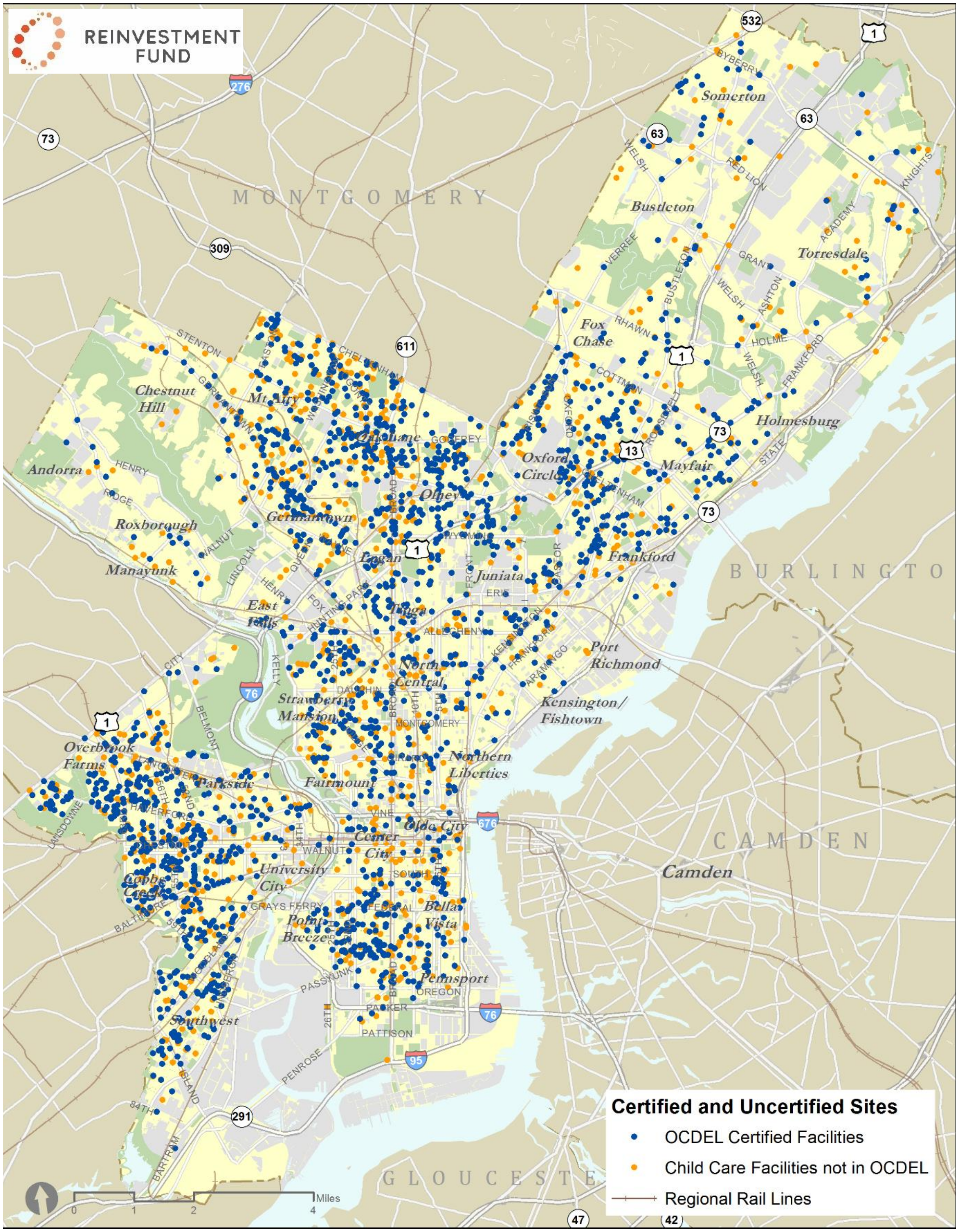


**Figure 2: Certified (OCDEL) Child Care Sites and Uncertified Child Care Sites (2015)**

| | Block Group Supply Level | | | | | |
|---|---|---|---|---|---|---|
| | Very Low Supply | Low Supply | Moderate Supply | High Supply | Very High Supply | Total |
| **All Supply** | | | | | | |
| (1) <10% Family Poverty | 18.1% | 26.2% | 35.0% | 14.1% | 6.6% | 100.0% |
| (2) 10% - 20% Family Poverty | 12.3% | 18.0% | 39.9% | 21.9% | 7.9% | 100.0% |
| (3) 20% - 40% Family Poverty | 4.5% | 17.8% | 44.4% | 20.3% | 13.0% | 100.0% |
| (4) >40% Family Poverty | 0.4% | 12.8% | 42.9% | 30.1% | 13.7% | 100.0% |
| (1) <10% African American | 29.4% | 30.6% | 24.8% | 11.8% | 3.3% | 100.0% |
| (2) 10-25% African American | 11.6% | 30.2% | 37.2% | 13.1% | 8.0% | 100.0% |
| (3) 25-50% African American | 4.1% | 24.0% | 50.5% | 14.8% | 6.6% | 100.0% |
| (4) 50-75% African American | 1.5% | 16.9% | 50.0% | 20.6% | 11.0% | 100.0% |
| (5) 75-90% African American | 2.2% | 11.8% | 39.0% | 29.4% | 17.6% | 100.0% |
| (6) 90-100% African American | 0.3% | 5.4% | 46.8% | 31.2% | 16.2% | 100.0% |
| (1) Distance to Nearest Train Stop 0.00_0.25 Mi | 5.0% | 8.1% | 39.4% | 26.2% | 21.3% | 100.0% |
| (2) Distance to Nearest Train Stop 0.25_0.50 Mi | 6.5% | 13.9% | 37.3% | 28.9% | 13.4% | 100.0% |
| (3) Distance to Nearest Train Stop 0.50_0.75 Mi | 6.3% | 24.2% | 38.7% | 22.5% | 8.3% | 100.0% |
| (4) Distance to Nearest Train Stop 0.75_1.00 Mi | 12.4% | 21.0% | 49.5% | 14.0% | 3.2% | 100.0% |
| (5) Distance to Nearest Train Stop > 1 Mi | 22.3% | 32.7% | 38.8% | 3.5% | 2.7% | 100.0% |
| **Certified Supply** | | | | | | |
| (1) <10% Family Poverty | 18.1% | 26.0% | 37.3% | 12.2% | 6.4% | 100.0% |
| (2) 10% - 20% Family Poverty | 11.0% | 21.9% | 37.3% | 22.4% | 7.5% | 100.0% |
| (3) 20% - 40% Family Poverty | 4.8% | 17.3% | 43.1% | 22.1% | 12.8% | 100.0% |
| (4) >40% Family Poverty | 0.4% | 11.1% | 42.9% | 30.5% | 15.0% | 100.0% |
| (1) <10% African American | 28.2% | 31.2% | 28.5% | 10.0% | 2.1% | 100.0% |
| (2) 10-25% African American | 11.6% | 27.1% | 37.7% | 13.1% | 10.6% | 100.0% |
| (3) 25-50% African American | 4.1% | 24.5% | 42.3% | 23.5% | 5.6% | 100.0% |
| (4) 50-75% African American | 1.5% | 13.2% | 48.5% | 24.3% | 12.5% | 100.0% |
| (5) 75-90% African American | 2.9% | 12.5% | 38.2% | 27.2% | 19.1% | 100.0% |
| (6) 90-100% African American | 0.6% | 8.1% | 48.6% | 27.3% | 15.3% | 100.0% |
| (1) Distance to Nearest Train Stop 0.00_0.25 Mi | 5.4% | 9.0% | 38.9% | 25.8% | 20.8% | 100.0% |
| (2) Distance to Nearest Train Stop 0.25_0.50 Mi | 6.3% | 13.9% | 37.6% | 28.3% | 13.9% | 100.0% |
| (3) Distance to Nearest Train Stop 0.50_0.75 Mi | 6.3% | 21.5% | 39.7% | 24.2% | 8.3% | 100.0% |
| (4) Distance to Nearest Train Stop 0.75_1.00 Mi | 10.2% | 24.2% | 50.5% | 12.4% | 2.7% | 100.0% |
| (5) Distance to Nearest Train Stop > 1 Mi | 23.5% | 33.1% | 36.9% | 3.8% | 2.7% | 100.0% |
| **High Quality Supply** | | | | | | |
| (1) <10% Family Poverty | 19.2% | 20.3% | 41.8% | 12.8% | 6.0% | 100.0% |
| (2) 10% - 20% Family Poverty | 13.2% | 21.5% | 43.0% | 21.1% | 1.3% | 100.0% |
| (3) 20% - 40% Family Poverty | 6.5% | 15.5% | 43.6% | 22.8% | 11.5% | 100.0% |
| (4) >40% Family Poverty | 4.0% | 15.0% | 29.6% | 27.9% | 23.5% | 100.0% |
| (1) <10% African American | 28.5% | 16.4% | 38.5% | 11.5% | 5.2% | 100.0% |
| (2) 10-25% African American | 7.0% | 22.6% | 34.7% | 17.1% | 18.6% | 100.0% |
| (3) 25-50% African American | 10.2% | 15.3% | 38.8% | 21.9% | 13.8% | 100.0% |
| (4) 50-75% African American | 10.3% | 18.4% | 33.1% | 20.6% | 17.6% | 100.0% |
| (5) 75-90% African American | 8.1% | 23.5% | 35.3% | 25.0% | 8.1% | 100.0% |
| (6) 90-100% African American | 1.2% | 16.8% | 51.1% | 25.5% | 5.4% | 100.0% |
| (1) Distance to Nearest Train Stop 0.00_0.25 Mi | 7.2% | 10.9% | 47.5% | 17.2% | 17.2% | 100.0% |
| (2) Distance to Nearest Train Stop 0.25_0.50 Mi | 10.1% | 15.3% | 37.3% | 23.7% | 13.6% | 100.0% |
| (3) Distance to Nearest Train Stop 0.50_0.75 Mi | 15.2% | 16.9% | 37.7% | 20.2% | 9.9% | 100.0% |
| (4) Distance to Nearest Train Stop 0.75_1.00 Mi | 14.0% | 22.0% | 35.5% | 23.7% | 4.8% | 100.0% |
| (5) Distance to Nearest Train Stop > 1 Mi | 13.1% | 26.9% | 44.2% | 13.1% | 2.7% | 100.0% |

**Table 3: Demographic/Economic Characteristics of Areas for Total, Certified, and STAR-3 or STAR-4 Center Supply**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Poverty / Race / Income / Distance | Average Number of Children <5 in BG | Average Number of Children <5 in BG (33% Allocation) | Average Number of Children <5 Within 1/2 Mile of BG (33% Allocation) | Average Total Supply Within 1/2 Mile of BG | Average Number of Childcare Facilities in BG | Average Certified (OCDEL) supply Within 1/2 Mile of BG | Percent of Supply that is Certified | Average Number of Certified Sites in BG | Average Capacity in STAR 3 and STAR 4 Sites Within 1/2 Mile of BG | Percent of Total Supply Within 1/2 Mile of BG that is High Quality | Percent of Certified Within 1/2 Mile of BG that is High Quality |
| All BG | 79 | 85 | 2825 | 1655 | 2.3 | 1198 | 72.4% | 1.4 | 286 | 17.3% | 23.9% |
| (1) <10% Family Poverty | 69 | 80 | 2698 | 1368 | 1.8 | 971 | 71.0% | 1 | 215 | 15.7% | 22.1% |
| (2) 10% - 20% Family Poverty | 77 | 76 | 2506 | 1609 | 2.5 | 1163 | 72.3% | 1.5 | 220 | 13.7% | 18.9% |
| (3) 20% - 40% Family Poverty | 86 | 85 | 2922 | 1818 | 2.7 | 1320 | 72.6% | 1.7 | 316 | 17.4% | 23.9% |
| (4) >40% Family Poverty | 95 | 91 | 3185 | 2023 | 2.5 | 1498 | 74.0% | 1.6 | 444 | 21.9% | 29.6% |
| (1) <10% African American | 68 | 85 | 2769 | 1077 | 1.2 | 756 | 70.2% | 0.6 | 191 | 17.7% | 25.3% |
| (2) 10-25% African American | 91 | 106 | 3400 | 1457 | 1.8 | 1094 | 75.1% | 1.1 | 360 | 24.7% | 32.9% |
| (3) 25-50% African American | 94 | 99 | 3288 | 1577 | 2.2 | 1185 | 75.1% | 1.4 | 334 | 21.2% | 28.2% |
| (4) 50-75% African American | 85 | 86 | 2714 | 1814 | 3 | 1391 | 76.7% | 1.9 | 331 | 18.2% | 23.8% |
| (5) 75-90% African American | 87 | 78 | 2538 | 2076 | 3.6 | 1525 | 73.5% | 2.3 | 290 | 14.0% | 19.0% |
| (6) 90-100% African American | 70 | 63 | 2421 | 2160 | 3 | 1498 | 69.4% | 1.9 | 291 | 13.5% | 19.4% |
| (1) Low Income (< 50% AMI) | 87 | 86 | 3233 | 2253 | 2.6 | 1674 | 74.3% | 1.7 | 532 | 23.6% | 31.8% |
| (2) Low-Middle Income (50% - 80% AMI) | 84 | 80 | 2954 | 1851 | 2.4 | 1349 | 72.9% | 1.5 | 319 | 17.2% | 23.6% |
| (3) Middle Income (80% - 100% AMI) | 83 | 77 | 2759 | 1761 | 2.6 | 1286 | 73.0% | 1.7 | 271 | 15.4% | 21.1% |
| (4) High Income (80% - 100% AMI) | 75 | 85 | 2632 | 1341 | 2.1 | 950 | 70.8% | 1.2 | 201 | 15.0% | 21.2% |
| (1) Distance to Nearest Train Stop 0.00-0.25 Mi | 70 | 107 | 3440 | 2132 | 2.6 | 1536 | 72.0% | 1.6 | 365 | 17.1% | 23.8% |
| (2) Distance to Nearest Train Stop 0.25-0.50 Mi | 75 | 81 | 2997 | 1908 | 2.4 | 1401 | 73.4% | 1.5 | 334 | 17.5% | 23.8% |
| (3) Distance to Nearest Train Stop 0.50-0.75 Mi | 80 | 74 | 2742 | 1658 | 2.3 | 1217 | 73.4% | 1.5 | 283 | 17.1% | 23.3% |
| (4) Distance to Nearest Train Stop 0.75-1.00 Mi | 83 | 76 | 2564 | 1437 | 2.1 | 1017 | 70.8% | 1.4 | 240 | 16.7% | 23.6% |
| (5) Distance to Nearest Train Stop > 1 Mi | 89 | 91 | 2345 | 1046 | 1.9 | 735 | 70.3% | 1.1 | 191 | 18.3% | 26.0% |

**Table 4: Average Supply of and Demand for Child Care by the Demographic and Economic Characteristics of Areas**

| | Block Group Level of Demand | | | | | |
|---|---|---|---|---|---|---|
| | Very Low Demand | Low Demand | Moderate Demand | High Demand | Very High Demand | Total |
| (1) <10% Family Poverty | 18.6% | 28.1% | 30.3% | 11.3% | 11.7% | 100.0% |
| (2) 10% - 20% Family Poverty | 13.2% | 19.7% | 43.9% | 20.2% | 3.1% | 100.0% |
| (3) 20% - 40% Family Poverty | 3.3% | 17.0% | 47.1% | 24.8% | 7.8% | 100.0% |
| (4) >40% Family Poverty | 1.8% | 8.4% | 44.7% | 29.6% | 15.5% | 100.0% |
| | | | | | | |
| (1) <10% African American | 20.9% | 26.7% | 27.0% | 11.2% | 14.2% | 100.0% |
| (2) 10-25% African American | 6.5% | 10.6% | 37.7% | 25.6% | 19.6% | 100.0% |
| (3) 25-50% African American | 7.7% | 6.1% | 29.1% | 40.8% | 16.3% | 100.0% |
| (4) 50-75% African American | 6.6% | 20.6% | 50.0% | 17.6% | 5.1% | 100.0% |
| (5) 75-90% African American | 5.1% | 27.9% | 39.7% | 24.3% | 2.9% | 100.0% |
| (6) 90-100% African American | 6.3% | 23.7% | 56.8% | 12.3% | 0.9% | 100.0% |
| | | | | | | |
| (1) Distance to Nearest Train Stop 0.00_0.25 Mi | 11.3% | 12.7% | 35.7% | 19.0% | 21.3% | 100.0% |
| (2) Distance to Nearest Train Stop 0.25_0.50 Mi | 9.3% | 16.9% | 39.2% | 20.7% | 13.9% | 100.0% |
| (3) Distance to Nearest Train Stop 0.50_0.75 Mi | 8.6% | 20.2% | 39.7% | 24.8% | 6.6% | 100.0% |
| (4) Distance to Nearest Train Stop 0.75_1.00 Mi | 8.1% | 18.3% | 51.1% | 18.3% | 4.3% | 100.0% |
| (5) Distance to Nearest Train Stop > 1 Mi | 13.5% | 31.2% | 36.9% | 15.4% | 3.1% | 100.0% |

**Table 5: Demographic/Economic Characteristics of Areas for Levels of Demand**

| | Block Group Shortage Level | | | | | |
|---|---|---|---|---|---|---|
| | Much Larger than Expected Shortage | Larger than Expected Shortage | Expected Shortage | Less than Expected Shortage | Much Less than Expected Shortage | Total |
| **All Supply Shortages** | | | | | | |
| (1) <10% Family Poverty | 15.4% | 23.5% | 39.0% | 13.0% | 9.2% | 100.0% |
| (2) 10% - 20% Family Poverty | 11.4% | 16.7% | 36.0% | 25.0% | 11.0% | 100.0% |
| (3) 20% - 40% Family Poverty | 6.0% | 19.3% | 42.1% | 21.1% | 11.5% | 100.0% |
| (4) >40% Family Poverty | 3.1% | 16.8% | 42.9% | 28.8% | 8.4% | 100.0% |
| (1) <10% African American | 23.6% | 31.8% | 37.9% | 6.4% | 0.3% | 100.0% |
| (2) 10-25% African American | 14.6% | 34.7% | 44.7% | 6.0% | 0.0% | 100.0% |
| (3) 25-50% African American | 9.2% | 27.0% | 48.0% | 11.7% | 4.1% | 100.0% |
| (4) 50-75% African American | 2.2% | 12.5% | 51.5% | 21.3% | 12.5% | 100.0% |
| (5) 75-90% African American | 2.2% | 10.3% | 30.1% | 36.8% | 20.6% | 100.0% |
| (6) 90-100% African American | 0.3% | 2.1% | 34.2% | 39.6% | 23.7% | 100.0% |
| (1) Distance to Nearest Train Stop 0.00-0.25 Mi | 3.6% | 13.6% | 40.7% | 27.6% | 14.5% | 100.0% |
| (2) Distance to Nearest Train Stop 0.25-0.50 Mi | 6.5% | 14.7% | 42.0% | 26.4% | 10.4% | 100.0% |
| (3) Distance to Nearest Train Stop 0.50-0.75 Mi | 10.3% | 16.2% | 43.4% | 21.2% | 8.9% | 100.0% |
| (4) Distance to Nearest Train Stop 0.75-1.00 Mi | 11.8% | 21.0% | 43.5% | 14.5% | 9.1% | 100.0% |
| (5) Distance to Nearest Train Stop > 1 Mi | 18.8% | 36.5% | 30.0% | 6.9% | 7.7% | 100.0% |
| **Certfied Supply Shortages** | | | | | | |
| (1) <10% Family Poverty | 11.9% | 20.0% | 33.5% | 16.2% | 18.3% | 100.0% |
| (2) 10% - 20% Family Poverty | 8.3% | 24.6% | 36.4% | 21.9% | 8.8% | 100.0% |
| (3) 20% - 40% Family Poverty | 10.8% | 18.3% | 44.1% | 21.6% | 5.3% | 100.0% |
| (4) >40% Family Poverty | 6.6% | 18.1% | 49.6% | 23.9% | 1.8% | 100.0% |
| (1) <10% African American | 12.1% | 17.9% | 22.7% | 21.8% | 25.5% | 100.0% |
| (2) 10-25% African American | 8.0% | 11.6% | 37.2% | 28.6% | 14.6% | 100.0% |
| (3) 25-50% African American | 4.6% | 16.8% | 42.9% | 30.6% | 5.1% | 100.0% |
| (4) 50-75% African American | 6.6% | 14.0% | 40.4% | 33.1% | 5.9% | 100.0% |
| (5) 75-90% African American | 10.3% | 16.9% | 56.6% | 14.7% | 1.5% | 100.0% |
| (6) 90-100% African American | 13.8% | 32.4% | 49.8% | 3.9% | 0.0% | 100.0% |
| (1) Distance to Nearest Train Stop 0.00-0.25 Mi | 12.2% | 24.9% | 46.6% | 12.7% | 3.6% | 100.0% |
| (2) Distance to Nearest Train Stop 0.25-0.50 Mi | 9.8% | 16.9% | 45.5% | 21.8% | 6.0% | 100.0% |
| (3) Distance to Nearest Train Stop 0.50-0.75 Mi | 7.3% | 19.2% | 40.1% | 24.5% | 8.9% | 100.0% |
| (4) Distance to Nearest Train Stop 0.75-1.00 Mi | 11.8% | 19.4% | 37.6% | 16.7% | 14.5% | 100.0% |
| (5) Distance to Nearest Train Stop > 1 Mi | 10.4% | 21.5% | 28.1% | 20.8% | 19.2% | 100.0% |
| **High Quality Supply Shortages** | | | | | | |
| (1) <10% Family Poverty | 15.8% | 20.0% | 28.4% | 18.6% | 17.3% | 100.0% |
| (2) 10% - 20% Family Poverty | 11.4% | 20.2% | 43.0% | 14.9% | 10.5% | 100.0% |
| (3) 20% - 40% Family Poverty | 5.8% | 20.3% | 46.6% | 21.6% | 5.8% | 100.0% |
| (4) >40% Family Poverty | 4.0% | 18.6% | 49.6% | 25.7% | 2.2% | 100.0% |
| (1) <10% African American | 21.8% | 19.7% | 22.1% | 14.2% | 22.1% | 100.0% |
| (2) 10-25% African American | 6.0% | 19.1% | 45.2% | 21.1% | 8.5% | 100.0% |
| (3) 25-50% African American | 10.2% | 17.9% | 48.5% | 16.8% | 6.6% | 100.0% |
| (4) 50-75% African American | 10.3% | 22.8% | 32.4% | 30.9% | 3.7% | 100.0% |
| (5) 75-90% African American | 8.1% | 19.9% | 58.1% | 11.8% | 2.2% | 100.0% |
| (6) 90-100% African American | 1.2% | 20.7% | 45.3% | 25.8% | 6.9% | 100.0% |

**Table 6:**
**Demographic/Economic Characteristics of Areas for Shortage in Total, Certified, and STAR 3- or STAR 4-Rated Child Care**

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