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

Prepared by **REINVESTMENT FUND**

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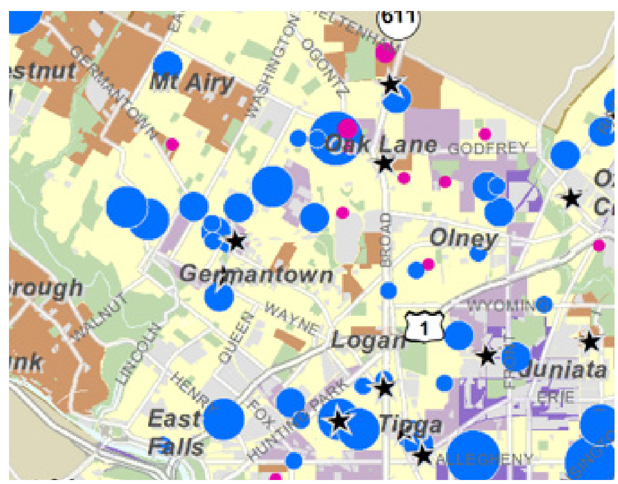

RESEARCH CONDUCTED BY

Policy Solutions at Reinvestment Fund

Ira Goldstein, President, Policy Solutions
Jacob L Rosch, Senior Policy Analyst

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Introduction

In 2014, with support from The William Penn Foundation, Reinvestment Fund conducted an initial analysis of the supply of and demand for child care in Philadelphia to identify areas of the city where targeted investments could help address shortages of high-quality child care. Now in its fifth update, Reinvestment Fund's 2019 childcare analysis provides updated estimates to track the change over time in the supply of, demand for, and shortages in child care. Reinvestment Fund's Childcare Map is an interactive online tool, www.childcaremap.org, that makes the results of this work accessible to the public at no cost. The tool identifies neighborhoods where high-quality child care is scarce in absolute and relative terms, while also providing actionable information for funders, practitioners, and childcare advocates.

This report presents the results of descriptive and spatial analyses of the child care landscape in Philadelphia in 2019. It details both short- and long-term changes in the supply of, demand for, and gaps in care; the year-to-year changes from 2018 to 2019, as well as shifts since the first analyses conducted in 2014. It is important to note that various factors could contribute to the observed changes. For example, demographic shifts and economic changes (e.g., rises in the level of labor force participation) can affect demand, operation cost can affect supply, and new policy initiatives and investments can directly impact gaps. To this last point, this analysis also presents the location of strategic investments made in facilities in high-gap areas through the Fund for Quality (FFQ). To assess the impact of FFQ investments on gaps between supply and demand, we will conduct subsequent updates to the childcare analysis in the years ahead.

2019 Key Findings

- **The gap in unmet demand for childcare has declined to about 12% in 2019.** With a total supply of 97,943 and a *maximum potential demand* of 110,656, Philadelphia registered an absolute shortage of childcare capacity of nearly 12,713 in 2019. Absolute shortage measures the raw difference between supply and maximum potential demand, not accounting for parents that choose in-home or informal care arrangements.

- **Total Supply declined slightly along with demand from 2018 to 2019.** The estimated total supply of childcare inched downward by 0.1% between 2018 and 2019, while the *maximum potential demand* declined by 2.1%.

- **High-quality supply continued to grow.** The number of high-quality seats has continued to rise. About 2,060 new high-quality seats were added since 2018. The number of high-quality seats has increased by 10,072 since 2014. As a result, high-quality seats met 29.7% of demand in 2019, compared to 21.2% in 2014.

- **The most severe shortages in high-quality supply persist in specific neighborhoods.** In 2019, the most severe relative shortages in high-quality child care continued to be in many of the same areas: parts of Northwest Philadelphia (Roxborough, Germantown); Eastwick and Cobbs Creek; the River Wards (Kensington/Fishtown, Port Richmond); several neighborhoods in the Northeast (Bustleton and Holmesburg). Shortages narrowed in Northern Liberties/River Wards, South Philadelphia, Strawberry Mansion, Somerton and Chestnut Hill.

Estimating the Supply of Child Care

Beginning in 2018, Pennsylvania's Office of Child Development and Early Learning (OCDEL) altered the Keystone STARS rating system to change how programs are rated and to remove the "Not STAR Rated" designation. Going forward, all sites formerly classified "Not STAR Rated" will be reclassified as 1 STAR. Additionally, changes to how programs can achieve a high-quality rating have the potential to increase the number of high-quality rated sites in Philadelphia substantially. While the results of that change were not apparent in 2018, they began to be evident in 2019.[1]

Table 1 presents the changes over time in the number and share of seats in total, certified, and high-quality providers across the city. In 2019, there was an estimated supply of 97,943 childcare seats.[2] Since 2018, the total supply of childcare declined by 130 or 0.1%. Between 2014 and 2019, the total supply of child care increased by 7,554 seats or 8% from 90,389 to 97,989.

Table 1: Estimated Supply of Total Child Care[3]

		2019 Childcare Analysis		Change from 2018		Change from 2014	
		Total Seats	Share of Total Seats	Total Seats	Share of Total Seats (Percentage Points)	Total Seats	Share of Total Seats (Percentage Points)
Certified		81,808	83.5%	141	0.3%	8,692	2.6%
	High-Quality	32,856	33.5%	2,060	2.1%	10,072	8.3%
	STARS 1-2	48,952	50.0%	-1,919	-1.9%	-1,380	-5.7%
	Not STAR Rated	0	0.0%	0	0.0%	-24,482	-27.1%
Not Certified		16,135	16.5%	-271	-0.3%	-1,138	-2.6%
Total Seats		97,943	100.0%	-130		7,554	

Certified operators provided approximately 84% of the supply (Table 1, see page 2). That share has been steadily increasing. Between 2014 and 2019, the share of certified seats increased by 2.6 percentage points from 80.9% of all seats to 83.5% of all seats. In terms of the number of seats, the supply of certified seats grew by 12% or 8,692 seats. The number and proportion of high-quality seats increased as well, with the number of high-quality seats growing by 10,072 or 44% since 2014. As a share of all seats, high-quality seats comprised 33.5% of all seats in 2019, a growth of 8.3 percentage points since 2014, when high-quality seats comprised only 25.2% of all seats.

Table 2 and Figure 2 (see page 3) present the number and share of certified seats by quality rating. In 2019, there were an estimated 32,856 high-quality seats (i.e., certified providers with a Keystone STARS rating of 3 or 4, Head Start providers, or School District sponsored childcare), accounting for 40% of certified seats. An estimated 48,952 certified seats (60%) had lower quality ratings (Keystone STARS ratings of 1 or 2). Between 2014 and 2019, the share of certified seats that were high-quality increased nine percentage points, from 22,784 out of 73,116 (31.3%) to 32,856 out of 81,808 (40.2%).

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[1] For more information about how changes to Keystone STARS are likely impacting centers in Philadelphia, see Reinvestment Fund's "Understanding How Changes to Keystone STARS Ratings Will Affect Gaps in the Supply of High-Quality Child Care" (https://goo.gl/hSb2nX).

[2] Please see initial methodology report at https://www.reinvestment.com/childcaremap/pdfs/full.pdf for more detailed information on sources for supply data and estimating supply.

[3] The 2019 Childcare Analysis represented 2019 Q1 OCDEL data; the 2018 Analysis represented 2018 Q1 data; and the 2014 Analysis represented 2013 Q2 data. Year-by-year change for licensed child care represented change between 2018 Q1 and 2019 Q1 (i.e., four quarters), and 2014-2019 change represented change between 2013 Q2 and 2019 Q1 (i.e., 23 quarters).

Table 2: Estimated Supply of Certified Child Care

Estimated Supply of Certified Child Care	Total Seats 2019	Share of Certified Seats 2019	Change in Share of Certified Seats (Percentage Points) 2018	Change in Share of Certified Seats (Percentage Points) 2014
High-Quality (STARS 3-4)	32,856	40.2%	+2.5%	+9.0%
STARS 1-2	48,952	59.8%	-2.5%	-9.0%
Not STAR Rated	0	0.0%	0.0%	-33.5%
Total Certified Seats	81,808	100.0%		

Figure 1: Estimated Supply of Total Child Care, 2019 (n=97,943)

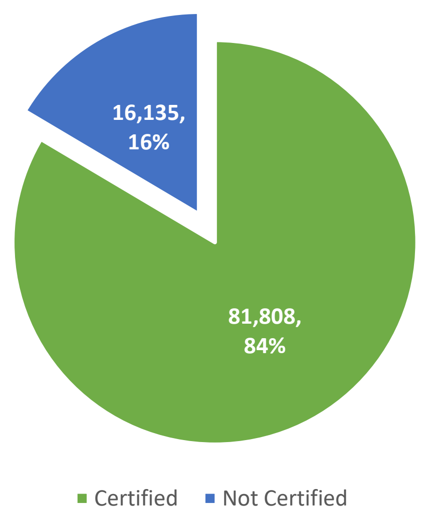
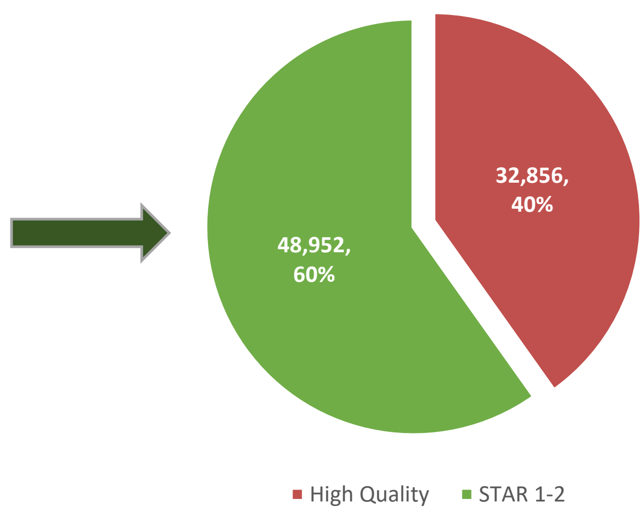


Figure 2: Estimated Supply of Certified Child Care, 2019 (n=81,808)



A primary goal for the childcare analysis is to support the Fund for Quality and other stakeholders to make data-based decisions about where in Philadelphia to expand access to high-quality child care. Table 3 and Figures 3 and 4 (see pages 4 – 6) highlight changes in high-quality child care between 2014 and 2019.

Table 3 summarizes the factors that contributed to the change in the high-quality supply between 2014 and 2019. Some of the sites that increased their rating may have done so as a result of changes to the Keystone STARS rating system implemented in 2018, rather than substantive programmatic changes. At this time, OCDEL has not released information detailing the justification for improved STARS ratings at the center level.

Table 3: Change in High-Quality Sites, 2014-2019

	Number of Sites	Total Capacity*
Positive Change	**203**	
Site STAR ***Rating Increased*** to High-Quality	123	8,344
High-Quality Site ***Increased Capacity***	40	4,619
Newly ***Opened*** High-Quality Site	80	6,394
Negative Change	**114**	
Site STAR ***Rating Decreased***	38	1,481
High-Quality Site ***Reduced Capacity***	27	2,534
Closed High-Quality Site	76	3,059
No Change in Rating or Capacity	**108**	10,965
*Capacity represents 2019 capacity with the exceptions of Closed High-Quality Sites. Capacity for this subgroup is 2014 capacity.		

From 2014 to 2019, nearly twice as many sites contributed to high-quality expansion than contributed to reductions (203 vs. 114 sites). While the number of newly opened high-quality sites was nearly equal to the number that closed (80 vs. 76), the size of newly opened high quality sites was nearly twice the capacity in sites that closed (6,294 vs. 3,059). The majority of new high-quality capacity growth came from sites that increased their rating. Overall, there were 378 high-quality providers in 2019, and the licensed capacity for 108 (29%) of these providers remained unchanged since 2014.

Figures 3 and 4 (see pages 5 and 6) present the spatial distribution of the factors highlighted in Table 3 to show what areas of the city have experienced substantial changes in high-quality supply since 2014. These Figures also include the location of Fund for Quality sites throughout the city.

Our analysis of supply relies on licensed capacity reported by OCDEL to measure the supply of high-quality seats. One limitation of these data are that, in some cases, licensed capacity may be larger than the actual operating capacity of an individual program. For example, a childcare site might have enough square footage to serve 100 children, but only employ enough staff to serve 60 in order to maintain a lower staff to child ratio for a higher-quality setting. In this case, the site's licensed capacity would be measured as 100, while the true operating capacity would be 60. FFQ investments, which are designed to increase the number of children served in high-quality programs, may in some cases increase operating capacity, without changing the site's licensed capacity recorded by OCDEL.

Areas in the city where the supply of high-quality seats substantially increased since 2014 include Center City, North Central, Parkside, Juniata, and Oak Lane/Olney. Olde City experienced the only substantial decline in high-quality seats, while modest declines in high-quality seats were concentrated in Point Breeze, Roxborough/Manayunk, Frankford, and Bustleton.

Figure 3: *Changes in Status* of High-Quality Centers & Changes in Supply Estimates for High-Quality Child Care (2014 to 2019)

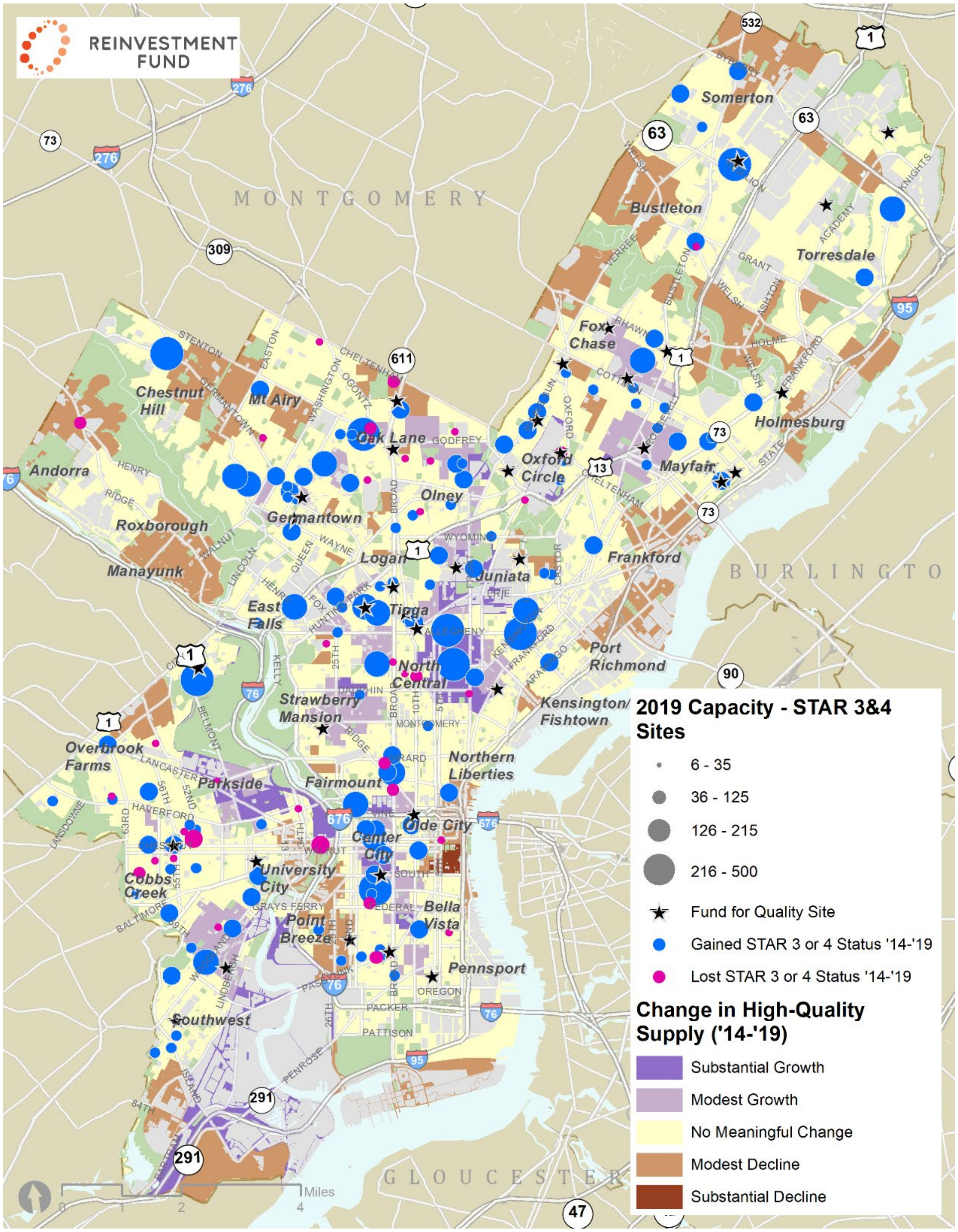


Figure 3:

- Only sites for which there was a change in status are reflected on this map.
- The black star represents a site that received Fund for Quality support between 2014 and 2019.
- Purple represents increases in high-quality supply; Brown represents declines in high-quality supply;
- Blue circles represent child care sites that increased their rating to high-quality status between 2014-19.
- Pink circles represent child care sites that reduced their rating to below high-quality status between 2014-19.
- The size of the circles represents the 2019 capacity of the facility.

Figure 4: ***Changes in Capacity*** **at High-Quality Centers & Changes in Supply Estimates for High-Quality Child Care (2014 to 2019)**

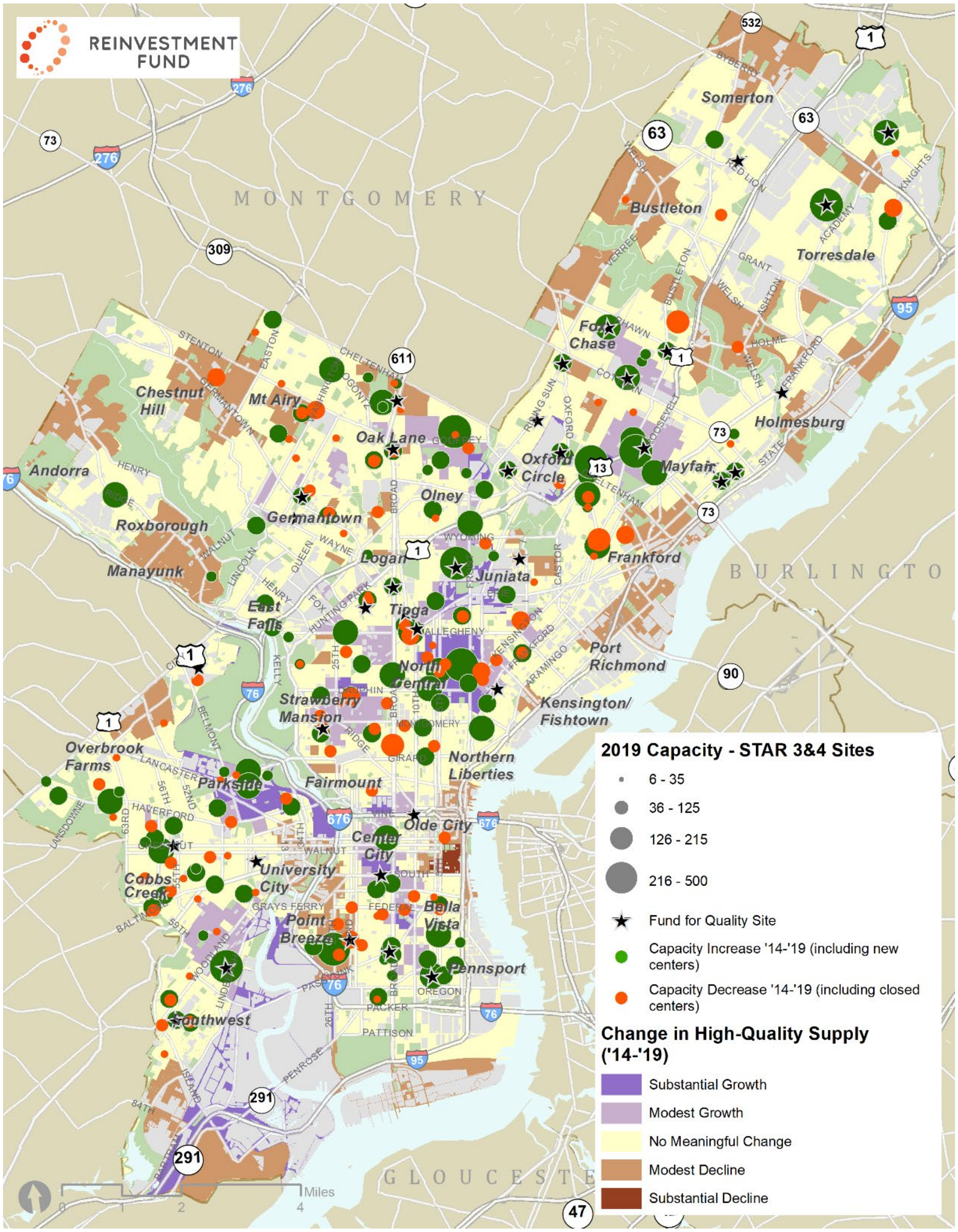


Figure 4:

- Only sites for which there was a change in capacity are reflected on this map.
- The black star represents a site that received Fund for Quality support between 2014 and 2019.
- Purple represents increases in high-quality supply; Brown represents declines in high-quality supply;
- Green circles represent high-quality child care sites that increased capacity between 2014-19.
- Orange circles represent high-quality child care sites that reduced their capacity between 2014-19.
- The size of the circles represents the 2019 capacity of the facility (closed centers reflect 2014 capacity).

Areas with the largest gains in the supply of high-quality child care between 2014 and 2019 (dark purple areas in Figures 3 and 4) contained both providers that improved their *rating*, as shown with blue circles in Figure 3 and existing high-quality providers that increased their *capacity*, as shown with green circles in Figure 4.

Demand for Child Care

In 2019, an estimated population of 106,783 children under age five living in Philadelphia represented the *baseline demand* for child care. From this *baseline demand*, adjustments were made to account for commuting patterns and characteristics of parents, as some parents prefer child care options near their work.[4] These adjustments suggest that 16,826 resident children travel with adults to child care located outside the city near a parent's place of work, while 20,799 children who live outside the city travel with parents to child care in the city, yielding a *maximum potential demand* of 110,656 for child care in Philadelphia.

Although *maximum potential demand* declined slightly between 2018 and 2019, by 2.1% (2,345), there was an overall increase since 2014 of 2.6% (+2,835). Demand in most neighborhoods was relatively stable. However, a handful of neighborhoods experienced substantial upticks in demand since 2014: North Philadelphia, Oak Lane, and Bustleton. On the other hand, Fairmount, and Olde City experienced sizable declines.

Identifying High Need Areas

Understanding the geographic distribution of shortages in the supply of child care guides programmatic and capital investment activity to address areas of concern. Two shortage measures are calculated: *absolute* and *relative shortage*. The *absolute shortage* is the raw difference between supply and maximum potential demand within a given block group. The *relative shortage* is an adjusted figure that accounts for supply and demand in neighboring block groups and the level of supply the market typically provides to identify block groups where observed shortages between supply and demand are: *a)* greater than expected; *b)* less than expected, or *c)* meet expectations.[5] As observed in previous reports, the geographic distributions of *absolute* and *relative shortages* are different for the three different types of supply – total, certified, and high-quality.

Absolute Shortage in Total and High Quality Supply

Absolute shortages in both total supply and high-quality supply have declined over time, but the supply of high quality care remains only a fraction of the total supply in the city. With a total demand of roughly 110,656 and a total supply of 97,943, about 12% of maximum potential demand was unmet in 2019 (i.e., a citywide absolute shortage of 12,713 seats) compared to more than 16% of demand unmet in 2014 and about 13% of demand in 2018.

The *absolute shortage* widens to 77,800 for high-quality seats. Although this shortage is still substantial, it has has been declining over time. High-quality seats met 29.7% of demand in 2019, compared to only 21.2% in 2014, and 27.3% in 2018 (See Table 4).

[4] Please see initial methodology report at https://www.reinvestment.com/child caremap/pdfs/full.pdf for more detailed information on sources for demand data, assumptions, and estimating demand.
[5] Please see initial methodology report at https://www.reinvestment.com/child caremap/pdfs/full.pdf for more detailed information on sources for the difference between the two types of gap measures.

Table 4. Commuter Adjusted Demand Met by Observed Supply

	2019	2018	2014
Absolute Shortage in Total Childcare Seats	12,713	14,928	17,431
Absolute Shortage in High-Quality Seats	77,800	82,205	85,036
Percentage of Maximum Potential Demand Met by All Seats (Supply)	88.5%	86.8%	83.8%
Percentage of Maximum Potential Demand Unmet by All Seats (Shortage)	11.5%	13.2%	16.2%
Percentage of Maximum Potential Demand Met by High-Quality Seats (Supply)	29.7%	27.3%	21.1%
Percentage of Maximum Potential Demand Unmet by High-Quality Seats (Shortage)	71.3%	72.7%	78.9%

Relative Shortage in Total Childcare Supply

Areas with the most severe *relative shortages* in total childcare seats in 2019 are concentrated along the Delaware River near Kensington and Port Richmond, in Greys Ferry, and throughout the Northeast (see Figure A2, on page 11). Since 2014, neighborhoods where *relative shortages* became more pronounced include Somerton, North Central, Overbrook Farms, and Point Breeze, while *relative shortages* narrowed in Bustleton, Torresdale, Mayfair, and Andorra/Roxborough (see Figure A3, on page 12).

Relative Shortage in Certified Supply

Areas with the most severe *relative shortages* in certified seats in 2019 concentrated in Mt Airy, Olney, Southwest, South Philadelphia, Overbrook Farm, and Oxford Circle, and Torresdale (see Figure A4, on page 13). Since 2014, neighborhoods, where relative shortages in certified seats became more pronounced include South Philadelphia, Southwest, and Fox Chase, while *relative shortages* narrowed near Point Breeze, Somerton, Homesburg, and Bustleton, due to an overall increase in the share of existing centers that were certified (see Figure A5, on page 14).

Relative Shortage in High-Quality Supply

Areas with the most severe *relative shortages* in high-quality seats in 2019 continue to be in many of the same areas as previous analyses: parts of Northwest Philadelphia – Roxborough/Manayunk, parts of Germantown and Olney; Overbrook Farms and Cobbs Creek; Center City; and a handful of Northeast neighborhoods (see Figure A6, on page 15). Since 2014, the largest increase in *relative shortages* occurred in Bustleton, while *relative shortage* narrowed in Somerton, Holmesburg, Torresdale, Chestnut Hill, Oxford Circle, and Northern Liberties (see Figure A7, on page 16).

Summary

The 2019 analysis highlights that ongoing challenges exist for families seeking high-quality child care in many of Philadelphia's neighborhoods and communities with significant job centers. Although the total supply of high-quality seats has expanded substantially since 2014, still only 30% of the estimated maximum potential demand is met by high-quality supply. Large shortages continue to persist in specific city neighborhoods, even as targeted investments continue in some communities. Further, this analysis does not account for the affordability of child care which remains a challenge given the persistently high number and percent of Philadelphia's households with low (and poverty-level) incomes.

In summer 2017, OCDEL began the implementation of a revised STAR rating system that will impact the supply of what is designated high-quality child care across the city (see Reinvestment Fund's white paper examining the potential impact[6]). The roll-out of the revised scores has been slow but these revised scores have begun to effect the analysis. Ongoing annual updates for this analysis of supply, demand and gaps will continue to track progress towards increasing access to high-quality child care through the Fund for Quality and other targeted programmatic interventions and investments.

[6] The white paper is available at https://www.reinvestment.com/childcaremap/.

APPENDIX A: Additional Maps and Tables

Figure A1: Certified and Uncertified Childcare Sites (2019)

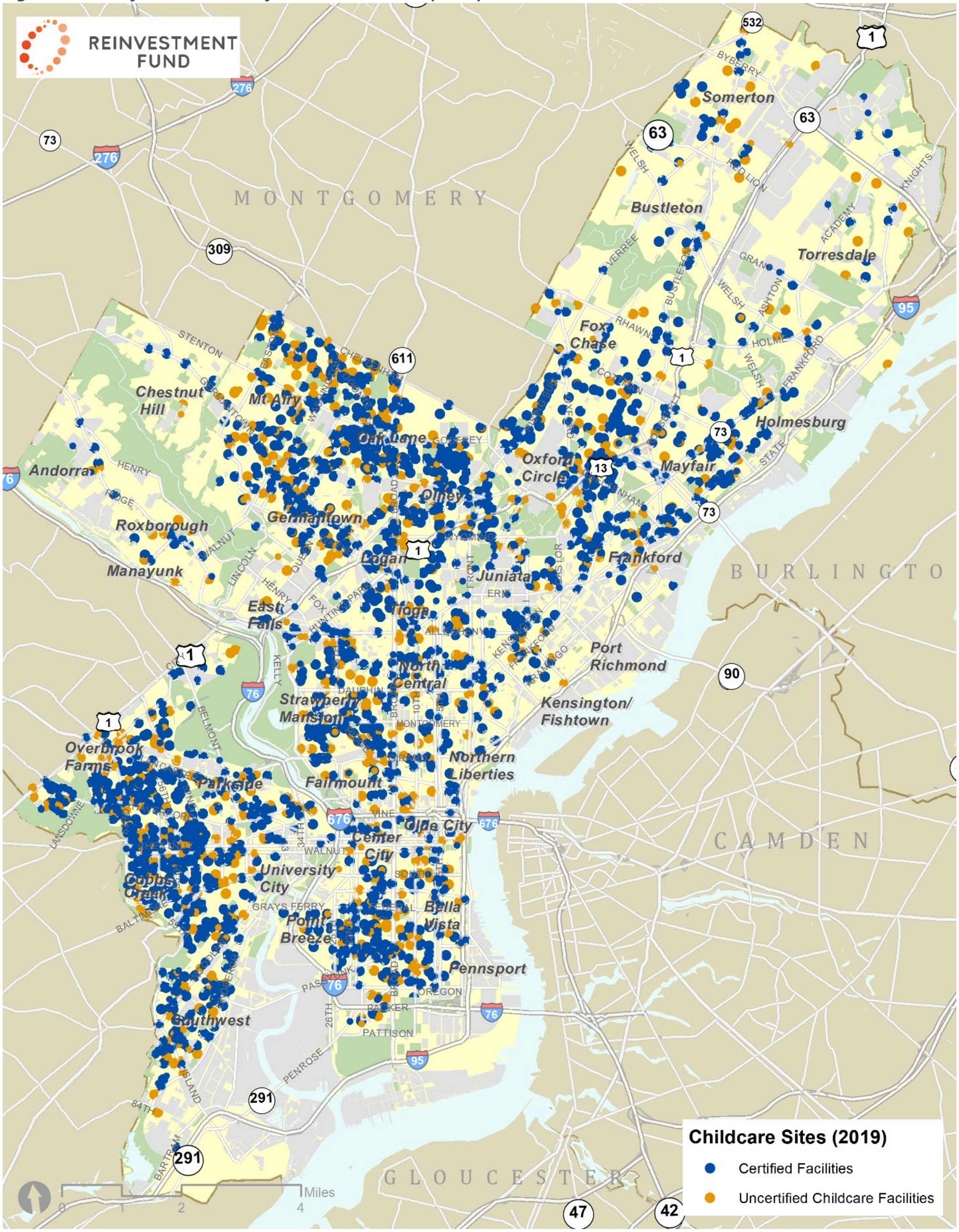


Figure A2: Relative Gap - Total Childcare Supply (2019)

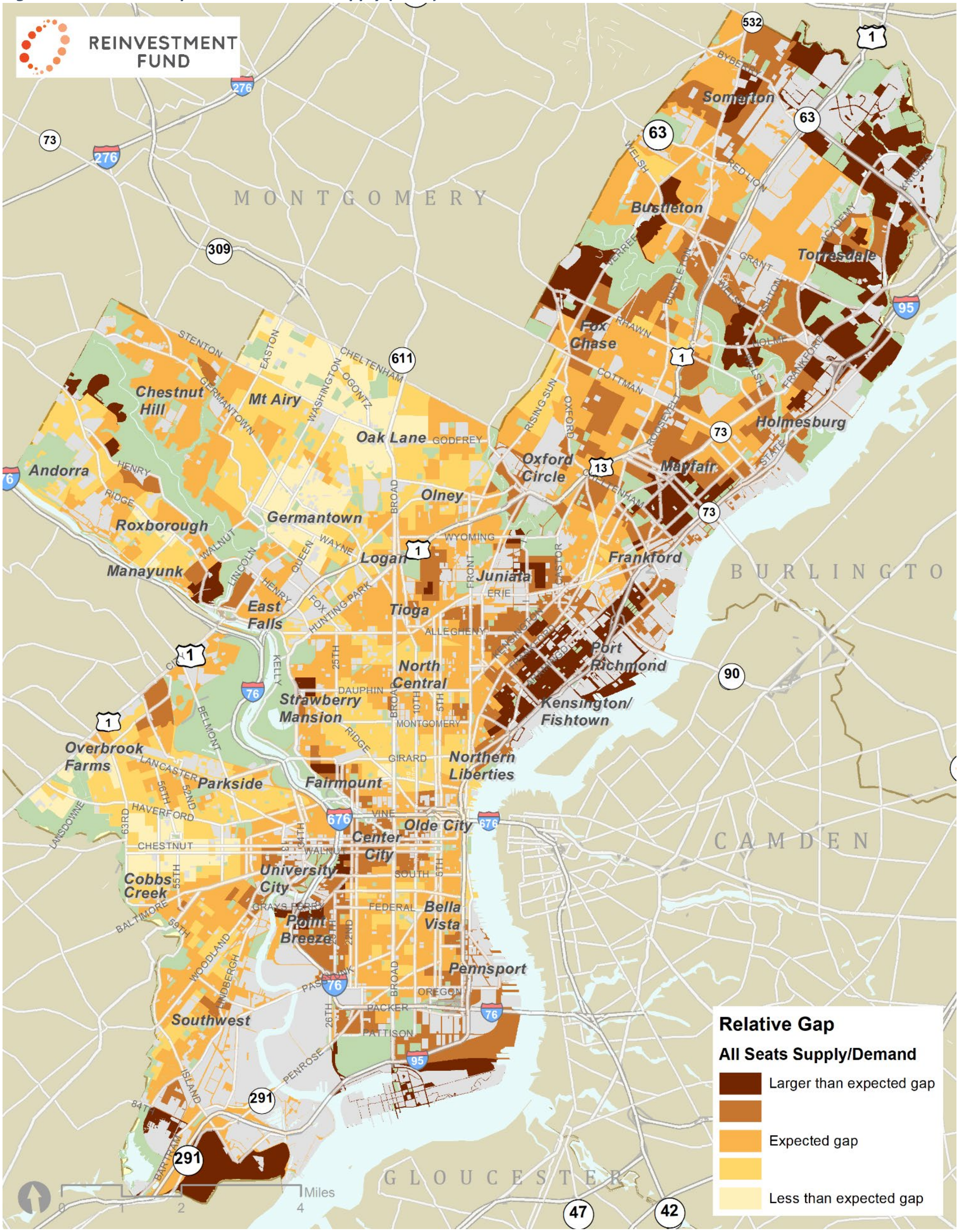


Figure A3 shows areas that have experienced changes in relative shortages since 2014 and areas with much larger than expected shortages in 2019. Areas outlined in maroon were areas that had much larger than expected shortages in 2019. Areas such as Mayfair and the far Southwest still had much larger than expected relative shortages, despite also seeing substantial declines in relative shortage since 2014. Areas in Somerton, Holmesburg, Point Breeze, and Overbrook experienced significant increases in relative shortage.

Figure A3: Change in Relative Gap - Total Childcare Supply (2014-2019)

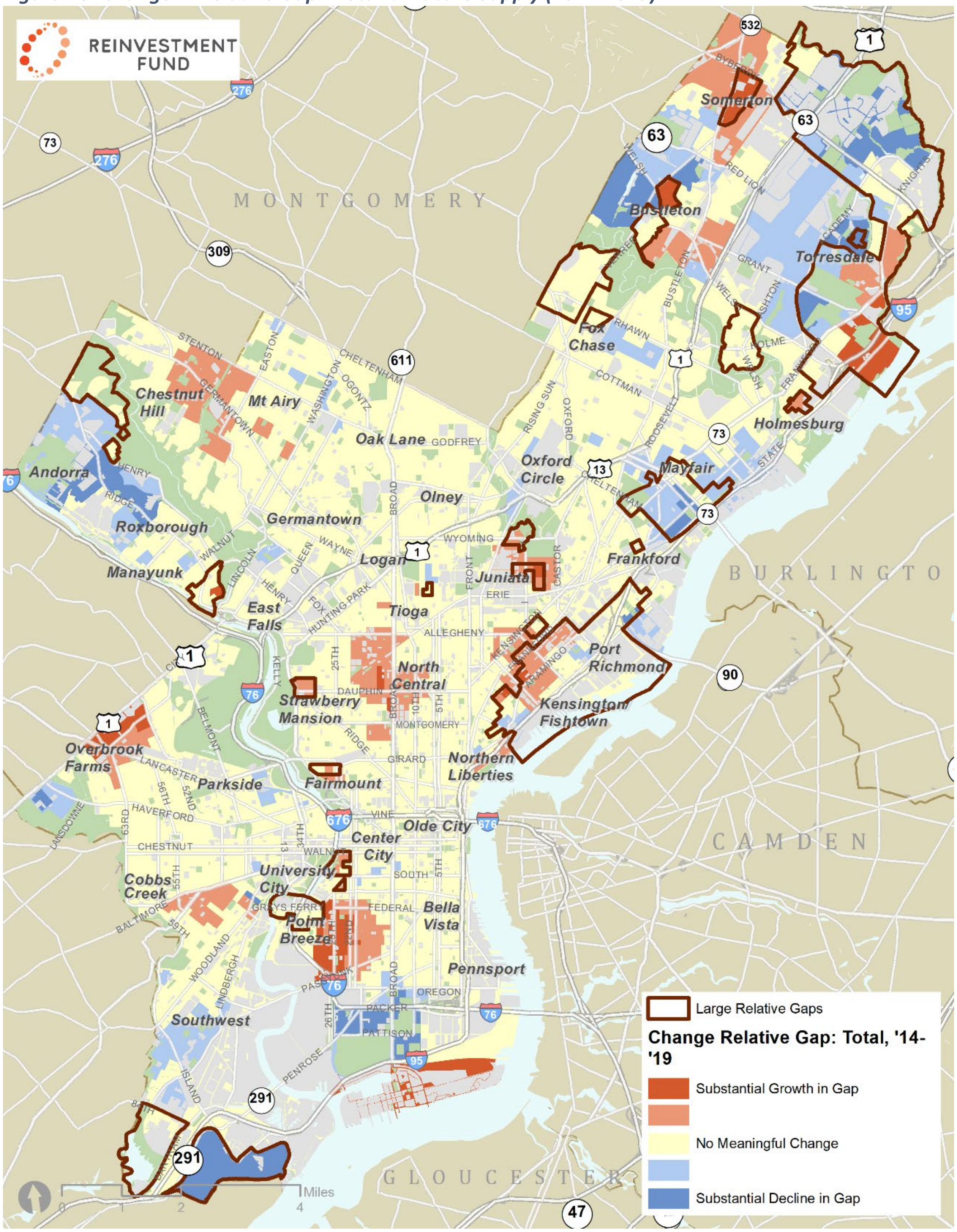


Figure A4: Relative Gap - Certified Childcare Supply (2019)

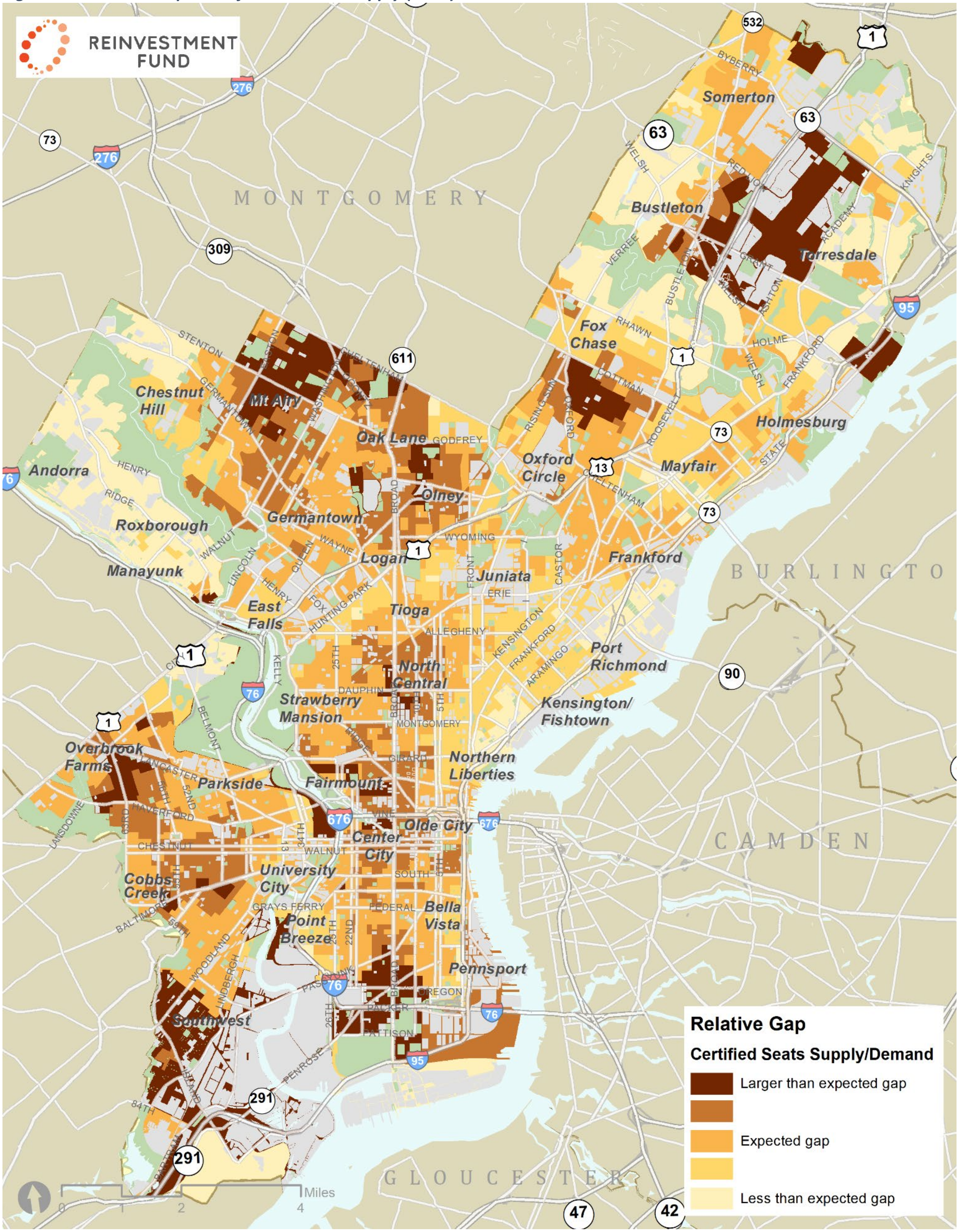


Figure A5 shows changes in the relative shortage of certified supply since 2014 and areas that had much larger than expected shortages of certified supply in 2019. Areas outlined in maroon were areas that had much larger than expected shortages in 2019. Regions of South Philadelphia and above Oxford Circle experienced substantial growth in the relative shortage. In 2019, the regions received a much larger than expected shortage classification. Areas in Bustleton and Holmesburg experienced substantial declines in certified shortages but still had larger than expected relative shortages in 2019.

Figure A5: Change in Relative Gap - Certified Childcare Supply (2014-2019)

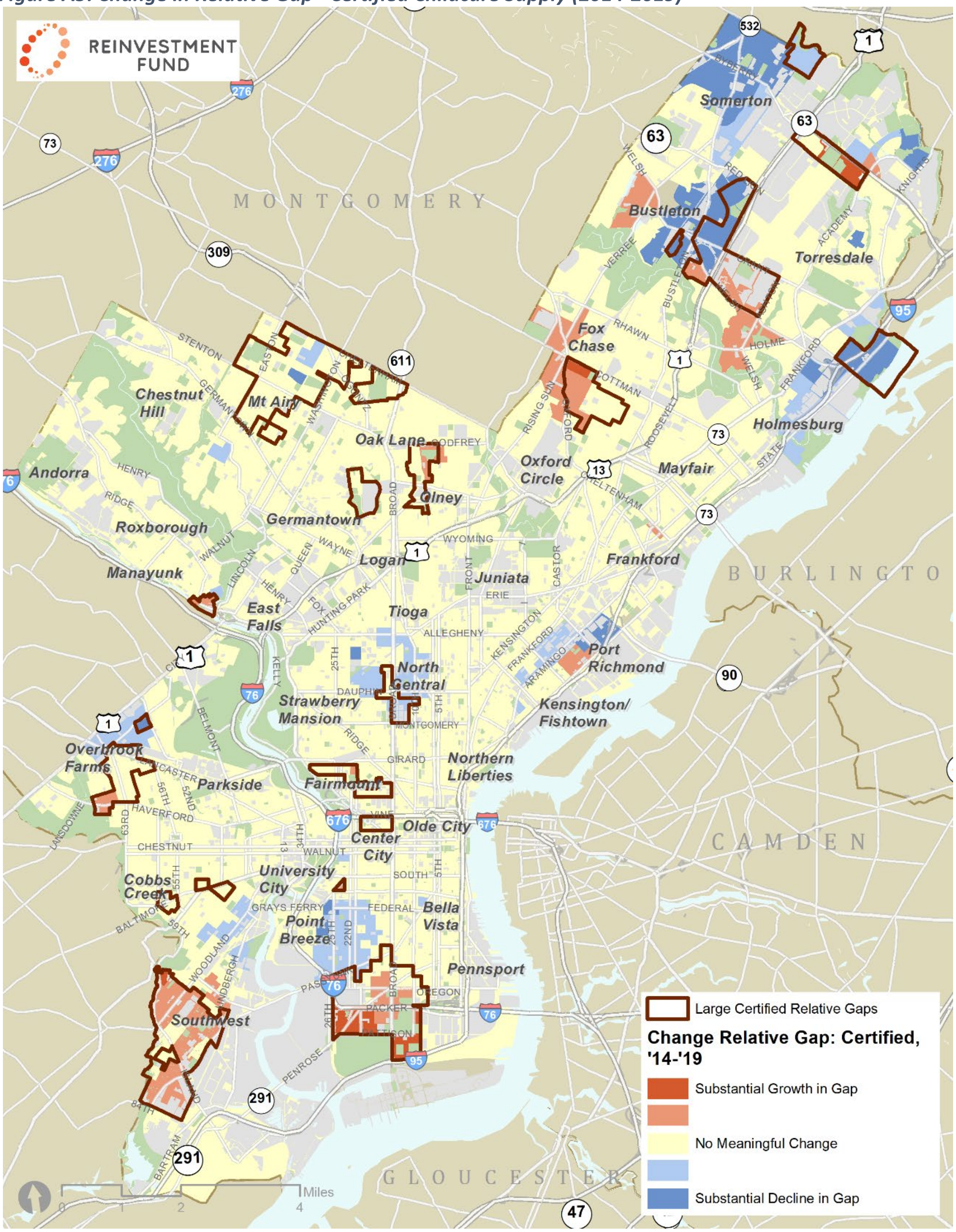


Figure A6: Relative Gap – High-Quality Childcare Supply (2019)

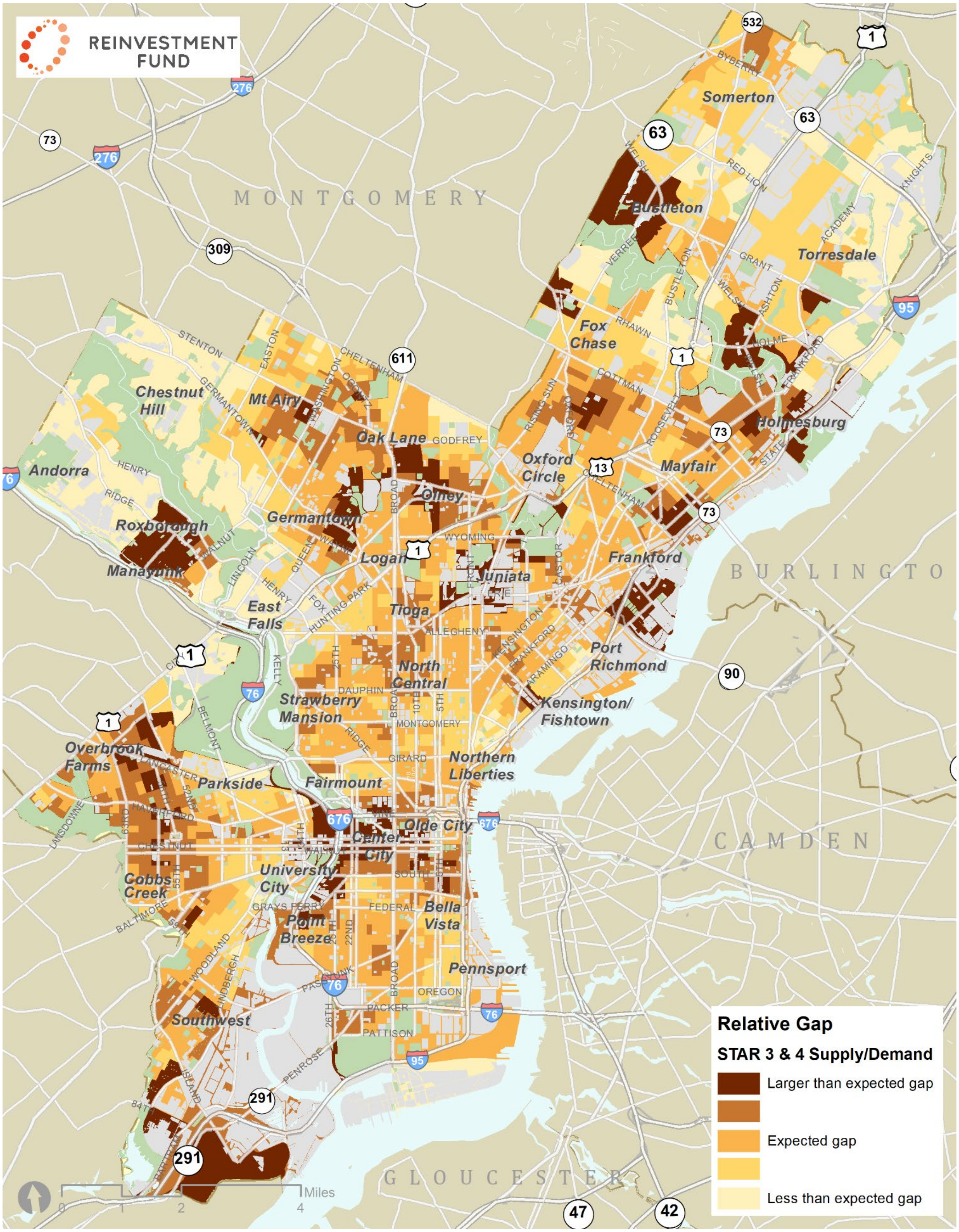


Figure A7 shows changes in the relative shortage of high-quality supply since 2014 and areas with much larger than expected shortages of high-quality supply in 2019. Areas outlined in the maroon experienced much larger than expected shortages in 2019. The Bustleton area experienced a substantial increase in relative shortage and received classification as having much larger than expected shortages of high-quality supply in 2019.

Figure A7: Change in Relative Gap – High-Quality Childcare Supply (2014-2019)

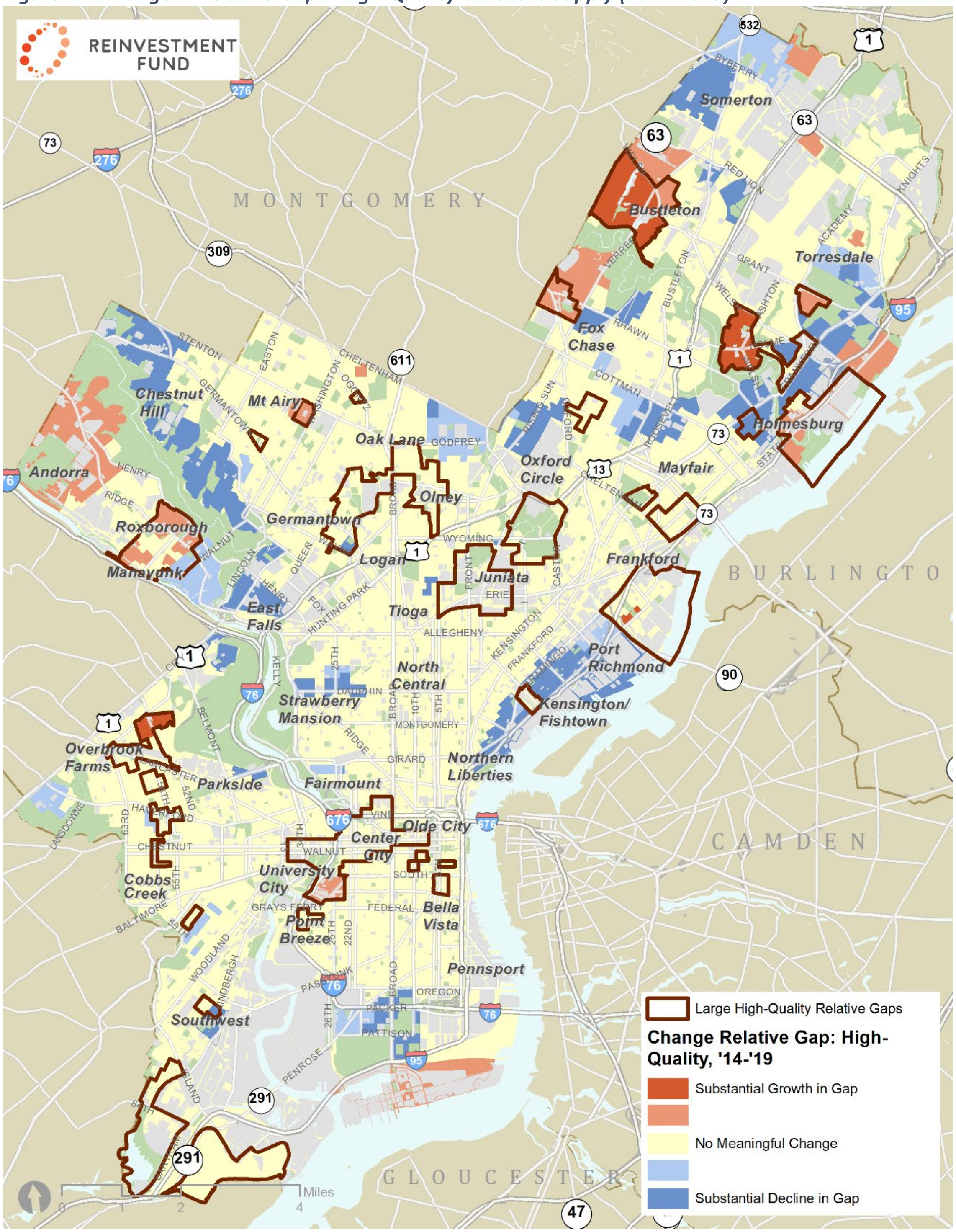


Table A2: Demographic/Economic Characteristics of Areas for Total, Certified, and High-Quality Childcare Supply

The table summarizes information by rows. For example, of all block groups with a family poverty rate of 10 percent or less, 20 percent has a very low supply. Supply classifications are based on percentile rank: Very Low Supply (0–10 percent); Low Supply (10-30 percent); Moderate Supply (30-70 percent); High Supply (70-90 percent) and Very High Supply (90-100 percent).

- Block groups with elevated poverty levels and higher percentages of African American residents, and those near train stops tended to have more supply across ***all*** supply measures.

	Very Low Supply	Low Supply	Moderate Supply	High Supply	Very High Supply	Total
ALL SUPPLY						
(1) <10% Family Poverty	20%	25%	34%	15%	6%	100%
(2) 10% - 20% Family Poverty	9%	23%	40%	21%	8%	100%
(3) 20% - 40% Family Poverty	2%	17%	46%	23%	12%	100%
(4) >40% Family Poverty	1%	10%	44%	26%	18%	100%
(1) <10% African American	23%	28%	31%	14%	4%	100%
(2) 10-25% African American	17%	26%	42%	11%	4%	100%
(3) 25-50% African American	5%	27%	42%	18%	8%	100%
(4) 50-75% African American	2%	18%	40%	27%	14%	100%
(5) 75-90% African American	2%	11%	44%	22%	20%	100%
(6) 90-100% African American	0%	5%	47%	32%	15%	100%
(1) 0.00-0.25 Mi to Nearest Train Station	6%	11%	33%	32%	17%	100%
(2) 0.25-0.50 Mi to Nearest Train Station	5%	19%	38%	25%	13%	100%
(3) 0.50-0.75 Mi to Nearest Train Station	8%	21%	43%	19%	11%	100%
(4) 0.75-1.00 Mi to Nearest Train Station	13%	19%	46%	18%	3%	100%
(5) > 1 Mi to Nearest Train Station	20%	29%	41%	6%	3%	100%
CERTIFIED SUPPLY						
(1) <10% Family Poverty	19%	25%	35%	15%	6%	100%
(2) 10% - 20% Family Poverty	9%	24%	41%	18%	9%	100%
(3) 20% - 40% Family Poverty	3%	17%	45%	24%	12%	100%
(4) >40% Family Poverty	2%	9%	43%	28%	18%	100%
(1) <10% African American	22%	27%	32%	15%	4%	100%
(2) 10-25% African American	16%	27%	41%	11%	5%	100%
(3) 25-50% African American	5%	26%	42%	20%	7%	100%
(4) 50-75% African American	3%	19%	37%	29%	13%	100%
(5) 75-90% African American	3%	11%	44%	23%	18%	100%
(6) 90-100% African American	1%	7%	48%	27%	17%	100%
(1) 0.00-0.25 Mi to Nearest Train Station	6%	11%	34%	32%	17%	100%
(2) 0.25-0.50 Mi to Nearest Train Station	5%	18%	36%	26%	14%	100%
(3) 0.50-0.75 Mi to Nearest Train Station	8%	20%	43%	19%	9%	100%
(4) 0.75-1.00 Mi to Nearest Train Station	13%	20%	46%	17%	4%	100%
(5) > 1 Mi to Nearest Train Station	20%	30%	42%	5%	3%	100%
HIGH-QUALITY SUPPLY						
(1) <10% Family Poverty	17%	25%	35%	15%	8%	100%
(2) 10% - 20% Family Poverty	10%	24%	44%	16%	6%	100%
(3) 20% - 40% Family Poverty	5%	16%	45%	23%	11%	100%
(4) >40% Family Poverty	1%	12%	39%	31%	17%	100%
(1) <10% African American	18%	21%	33%	16%	11%	100%
(2) 10-25% African American	16%	22%	28%	23%	12%	100%
(3) 25-50% African American	5%	16%	46%	21%	12%	100%
(4) 50-75% African American	4%	16%	43%	27%	10%	100%
(5) 75-90% African American	8%	18%	42%	23%	8%	100%
(6) 90-100% African American	2%	25%	51%	16%	6%	100%
(1) 0.00-0.25 Mi to Nearest Train Station	6%	12%	38%	24%	19%	100%
(2) 0.25-0.50 Mi to Nearest Train Station	9%	14%	39%	26%	12%	100%
(3) 0.50-0.75 Mi to Nearest Train Station	10%	20%	42%	18%	9%	100%
(4) 0.75-1.00 Mi to Nearest Train Station	12%	22%	41%	19%	6%	100%
(5) > 1 Mi to Nearest Train Station	13%	33%	38%	11%	3%	100%

Table A3: Average Block Group (BG) Demand for Child Care by Demographic and Economic Characteristics

- On average, a block group in Philadelphia has 80 children between the ages of zero to four and a commuter adjusted demand of 83.
- Block groups with elevated family poverty rates, lower incomes, a moderate share of African Americans, or near train stops tended to have elevated demand compared to the citywide average.

	Average Baseline Demand	Average Commuter Adjusted Demand	Average Maximum Potential Demand within ½ mile of BG	Average Total Supply within ½ mile of BG
All BG	80	83	2,728	1,586
(1) <10% Family Poverty	65	76	2,510	1,305
(2) 10% - 20% Family Poverty	86	83	2,439	1,559
(3) 20% - 40% Family Poverty	88	83	2,822	1,758
(4) >40% Family Poverty	99	96	3,291	1,955
(1) <10% African American	73	84	2,850	1,186
(2) 10-25% African American	86	96	2,915	1,279
(3) 25-50% African American	94	95	2,992	1,517
(4) 50-75% African American	83	80	2,711	1,778
(5) 75-90% African American	85	80	2,487	1,968
(6) 90-100% African American	70	63	2,364	2,057
(1) Low Income < (50% AMI)	95	95	3,321	2,065
(2) Low-Middle Income (50% - 80% AMI)	92	93	2,968	1,882
(3) Middle Income (80% - 100% AMI)	87	87	2,637	1,597
(4) High Income (>100% AMI)	71	75	2,479	1,294
(1) 0.00-0.25 Mi to Nearest Train Station	71	104	3,288	1,969
(2) 0.25-0.50 Mi to Nearest Train Station	77	78	2,898	1,771
(3) 0.50-0.75 Mi to Nearest Train Station	80	74	2,661	1,575
(4) 0.75-1.00 Mi to Nearest Train Station	84	77	2,503	1,408
(5) > 1 Mi to Nearest Train Station	89	86	2,252	1,138

Table A4: Average Block Group (BG) Supply of Child Care by Demographic and Economic Characteristics

- On average, a block group in Philadelphia has two childcare sites and one certified site.
- Greatest average access to high-quality childcare is found within ½ mile of high poverty areas and low-income areas.

	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 High-Quality 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	2	1,328	84%	1	529	33%	40%
(1) <10% Family Poverty	1	1,075	82%	1	437	33%	41%
(2) 10% - 20% Family Poverty	2	1,286	82%	1	461	30%	36%
(3) 20% - 40% Family Poverty	2	1,478	84%	2	582	33%	39%
(4) >40% Family Poverty	2	1,693	87%	2	712	36%	42%
(1) <10% African American	1	1,007	85%	1	482	41%	48%
(2) 10-25% African American	1	1,104	86%	1	524	41%	47%
(3) 25-50% African American	2	1,283	85%	1	588	39%	46%
(4) 50-75% African American	2	1,483	83%	2	597	34%	40%
(5) 75-90% African American	3	1,627	83%	2	533	27%	33%
(6) 90-100% African American	2	1,690	82%	2	503	24%	30%
(1) Low Income < (50% AMI)	2	1,800	87%	2	783	38%	43%
(2) Low-Middle Income (50% - 80% AMI)	2	1,588	84%	2	592	31%	37%
(3) Middle Income (80% - 100% AMI)	2	1,307	82%	2	501	31%	38%
(4) High Income (>100% AMI)	1	1,068	82%	1	434	34%	41%

(1) 0.00-0.25 Mi to Nearest Train Station	2	1,654	84%	1	659	33%	40%
(2) 0.25-0.50 Mi to Nearest Train Station	2	1,488	84%	1	587	33%	39%
(3) 0.50-0.75 Mi to Nearest Train Station	2	1,324	84%	1	525	33%	40%
(4) 0.75-1.00 Mi to Nearest Train Station	2	1,183	84%	1	462	33%	39%
(5) > 1 Mi to Nearest Train Station	1	935	82%	1	387	34%	41%

Table A5: Demographic/Economic Characteristics of Areas by Level of Demand

Table A5 should be read across each row. For example, of all block groups with a family poverty rate of 10 percent or less, 18 percent have very low demand. Demand classifications are based on percentile rank: Very Low Demand (0–10 percent); Low Demand (10-30 percent); Moderate Demand (30-70 percent); High Demand (70-90 percent), and Very High Demand (90-100 percent).

- Block groups with higher poverty rates tended to have high demand.
- Block groups with lower percentages of African American residents tended to have high demand.

	Very Low Demand	Low Demand	Moderate Demand	High Demand	Very High Demand	Total
(1) <10% Family Poverty	18%	29%	31%	12%	10%	100%
(2) 10% - 20% Family Poverty	11%	23%	43%	19%	4%	100%
(3) 20% - 40% Family Poverty	3%	14%	48%	28%	8%	100%
(4) >40% Family Poverty	0%	7%	46%	27%	20%	100%
(1) <10% African American	15%	23%	32%	13%	17%	100%
(2) 10-25% African American	13%	17%	29%	23%	17%	100%
(3) 25-50% African American	9%	14%	32%	32%	13%	100%
(4) 50-75% African American	5%	19%	41%	30%	5%	100%
(5) 75-90% African American	7%	21%	53%	17%	2%	100%
(6) 90-100% African American	6%	23%	58%	13%	0%	100%
(1) 0.00-0.25 Mi to Nearest Train Station	10%	12%	34%	23%	20%	100%
(2) 0.25-0.50 Mi to Nearest Train Station	9%	15%	42%	20%	14%	100%
(3) 0.50-0.75 Mi to Nearest Train Station	9%	19%	40%	24%	8%	100%
(4) 0.75-1.00 Mi to Nearest Train Station	8%	19%	52%	18%	3%	100%
(5) > 1 Mi to Nearest Train Station	14%	36%	33%	15%	3%	100%

Table A6: Demographic/Economic Characteristics of Areas for Relative Shortages in Total, Certified, and High-Quality Child Care

Table A6 should be read across each row. For example, of all block groups with a family poverty rate of 10 percent or less, 16 percent has much larger than expected shortage.

- A plurality of block groups with high poverty rates tended to have expected relative gaps across all three supply measures. Concerning high-quality supply, more low poverty block groups had "much larger than expected shortages" than block groups with higher poverty rates.
- Although block groups with at least a 75% African American population tended to have lower gaps in total child care, gaps for predominantly African American areas were more severe for certified and high-quality child care.

	Much Larger than Expected Shortage	Larger than Expected Shortage	Expected Shortage	Less than Expected Shortage	Much Less than Expected Shortage	Total
ALL SUPPLY						
(1) <10% Family Poverty	16%	22%	37%	17%	9%	100%
(2) 10% - 20% Family Poverty	9%	19%	36%	21%	15%	100%
(3) 20% - 40% Family Poverty	6%	16%	46%	23%	10%	100%
(4) >40% Family Poverty	4%	21%	42%	24%	9%	100%
(1) <10% African American	21%	29%	43%	7%	1%	100%
(2) 10-25% African American	15%	32%	43%	9%	0%	100%
(3) 25-50% African American	10%	27%	43%	16%	4%	100%
(4) 50-75% African American	3%	20%	39%	27%	10%	100%

	Much Larger than Expected Shortage	Larger than Expected Shortage	Expected Shortage	Less than Expected Shortage	Much Less than Expected Shortage	Total
(5) 75-90% African American	2%	4%	41%	31%	22%	100%
(6) 90-100% African American	1%	3%	31%	38%	27%	100%
(1) 0.00-0.25 Mi to Nearest Train Station	4%	19%	43%	22%	12%	100%
(2) 0.25-0.50 Mi to Nearest Train Station	6%	18%	42%	25%	9%	100%
(3) 0.50-0.75 Mi to Nearest Train Station	10%	16%	41%	25%	9%	100%
(4) 0.75-1.00 Mi to Nearest Train Station	14%	20%	39%	15%	12%	100%
(5) > 1 Mi to Nearest Train Station	18%	28%	34%	9%	10%	100%
CERTIFIED SUPPLY						
(1) <10% Family Poverty	12%	18%	33%	18%	18%	100%
(2) 10% - 20% Family Poverty	14%	20%	35%	21%	9%	100%
(3) 20% - 40% Family Poverty	8%	23%	46%	19%	4%	100%
(4) >40% Family Poverty	4%	21%	49%	25%	1%	100%
(1) <10% African American	10%	12%	27%	31%	21%	100%
(2) 10-25% African American	9%	10%	30%	33%	18%	100%
(3) 25-50% African American	5%	20%	44%	24%	8%	100%
(4) 50-75% African American	7%	24%	52%	15%	2%	100%
(5) 75-90% African American	12%	29%	51%	5%	2%	100%
(6) 90-100% African American	15%	31%	49%	4%	0%	100%
(1) 0.00-0.25 Mi to Nearest Train Station	10%	33%	37%	17%	3%	100%
(2) 0.25-0.50 Mi to Nearest Train Station	7%	28%	40%	19%	7%	100%
(3) 0.50-0.75 Mi to Nearest Train Station	9%	17%	45%	20%	9%	100%
(4) 0.75-1.00 Mi to Nearest Train Station	10%	9%	46%	24%	11%	100%
(5) > 1 Mi to Nearest Train Station	16%	10%	32%	22%	21%	100%
HIGH-QUALITY SUPPLY						
(1) <10% Family Poverty	14%	17%	27%	23%	18%	100%
(2) 10% - 20% Family Poverty	8%	21%	43%	21%	7%	100%
(3) 20% - 40% Family Poverty	8%	20%	48%	20%	5%	100%
(4) >40% Family Poverty	6%	26%	54%	12%	3%	100%
(1) <10% African American	13%	18%	29%	22%	18%	100%
(2) 10-25% African American	14%	14%	40%	22%	10%	100%
(3) 25-50% African American	5%	16%	51%	20%	9%	100%
(4) 50-75% African American	7%	14%	52%	18%	9%	100%
(5) 75-90% African American	8%	28%	43%	17%	4%	100%
(6) 90-100% African American	10%	29%	38%	19%	4%	100%
(1) 0.00-0.25 Mi to Nearest Train Station	12%	25%	43%	14%	6%	100%
(2) 0.25-0.50 Mi to Nearest Train Station	11%	20%	44%	18%	7%	100%
(3) 0.50-0.75 Mi to Nearest Train Station	9%	22%	40%	22%	7%	100%
(4) 0.75-1.00 Mi to Nearest Train Station	9%	20%	41%	25%	6%	100%
(5) > 1 Mi to Nearest Train Station	10%	14%	30%	23%	23%	100%

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PHILADELPHIA
1700 Market Street
19th Floor
Philadelphia, PA 19103
TEL 215.574.5800

BALTIMORE
1707 North Charles Street
Suite 200B
Baltimore, MD 21201
TEL 410.783.1110

ATLANTA
229 Peachtree Street NE
Suite 750, International Tower
Atlanta, GA 30303
TEL 404.400.1130

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