



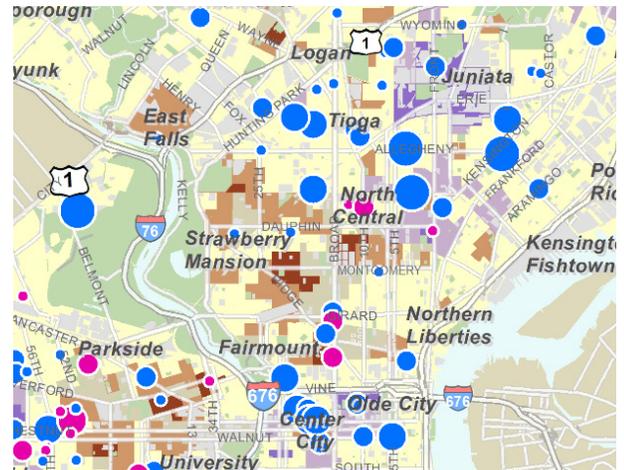
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Estimating Changes in the Supply of and Demand for Child Care in Philadelphia

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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 sixth update, Reinvestment Fund's 2020 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.

The 2020 report captures the conditions in the city's childcare market at a critical time. The data presented in this report captures supply and demand for childcare between January and March of 2020, as the impacts of the COVID-19 Pandemic were only just beginning to become apparent. To the best extent possible, the estimates presented in this report represent a snapshot of supply and demand for childcare in the first quarter of 2020, just prior to the onset of the pandemic.¹ Supply estimates presented in this report do not account for mandatory reductions in program capacity or closures that were imposed in response to the pandemic. Similarly, demand estimates do not capture changes in parent preferences that may have occurred when large portions of the region's workforce experienced employment disruptions or shifted to working from home.

The following pages present the results of descriptive and spatial analyses of the childcare landscape in Philadelphia at the start of 2020. It details both short- and long-term changes in the supply of, demand for, and gaps in care; the year-to-year changes from 2019 to 2020, as well as shifts since the first analyses conducted in 2014.

It is important to note that various factors could have contributed 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).

2020 Key Findings

- **The gap in unmet demand for childcare reached its lowest level just prior to the COVID-19 Pandemic.** With an estimated total supply of 97,889 and a *maximum potential demand* of 107,504, Philadelphia registered an absolute shortage of childcare capacity of 9,615 in 2020. Absolute shortage measures the raw difference between supply and maximum potential demand, not accounting for parents that choose in-home or informal care arrangements.

¹ In particular, data on the capacity of OCDEL licensed programs represents capacity on January 6, 2020. Data on enrollment in School District of Philadelphia associated programs and private schools reflect enrollments during the 2019-2020 school year. Additional supply data are collected on a rolling basis, but reflect information collected prior to March 2020.

- **Total supply was stable while demand declined slightly from 2019 to 2020.** The estimated total supply of childcare inched downward by less than 0.1% between 2019 and 2020, while the *maximum potential demand* declined by 3%.
- **High-quality supply continued to grow.** The number of high-quality seats has continued to rise. Over 1,000 new high-quality seats were added in the city between 2019 and 2020 and the number of high-quality seats has increased by 11,155 since 2014. As a result, high-quality seats met 32% of demand in 2020, compared to 21% in 2014.
- **The most severe shortages in high-quality supply persist in specific neighborhoods.** In 2020, 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); the River Wards (Kensington/Fishtown, Port Richmond); several neighborhoods in the Northeast (Bustleton and Holmesburg). The largest growth in high-quality seats occurred in the Fox Chase and Juniata neighborhoods.

Estimating the Supply of Child Care

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 2020, there was an estimated supply of 97,889 childcare seats.² Since 2019, the total supply of childcare was essentially flat, declining by 54 seats or less than 0.1%. However, between 2014 and 2020, the total supply of child care increased by 7,617 seats or 8% from 90,272 to 97,889.

Table 1: Estimated Supply of Total Child Care³

	2020 Childcare Analysis		Change from 2019		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	83,256	85.1%	+1,448	+1.5%	+10,252	+4.2%
High-Quality	33,899	34.6%	+1,043	+1.1%	+11,155	+9.4%
STARS 1-2	49,357	50.4%	+405	+0.4%	-903	-5.3%
Not Certified	14,633	14.9%	-1,502	-1.5%	-2,635	-4.2%
Total Seats	97,889	100.0%	-54		+7,617	

Certified operators provided approximately 85% of the supply. That share has been steadily increasing. Between 2014 and 2020, the share of certified seats increased by 4 percentage points from 81% of all seats to 85% of all seats. In terms of the number of seats, the supply of certified seats grew by 14% or 10,252.

For the purposes of this analysis, high-quality programs were identified as sites that received a STARS rating of 3 or 4 or participated in Head Start or a School District of Philadelphia sponsored-program. The number and proportion of high-quality seats increased as well, with the number of growing by 11,155 or 49% since 2014. As a share of all seats, high-quality seats comprised 34.6% of the total in 2020, a growth of 9.4 percentage points since 2014, when high-quality seats comprised only 25.2% of the supply.

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 2020 Childcare Analysis represented 2020 Q1 OCDEL data; the 2019 Analysis represented 2019 Q1 data; and the 2014 Analysis represented 2013 Q2 data. Year-by-year change for licensed child care represented change between 2020 Q1 and 2019 Q1 (i.e., four quarters), and 2014-2020 change represented change between 2013 Q2 and 2020 Q1 (i.e., 27 quarters).

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 2020.

Table 3 summarizes the factors that contributed to the change in the high-quality supply between 2014 and 2020. 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.⁴

Table 3: Change in High-Quality Sites, 2014-2020

	Number of Sites	Total Capacity*
Positive Change	228	
Site STAR <i>Rating Increased</i> to High-Quality	133	8,734
High-Quality Site <i>Increased Capacity</i>	43	5,158
Newly <i>Opened</i> High-Quality Site	95	7,014
Negative Change	117	
Site STAR <i>Rating Decreased</i>	31	1,108
High-Quality Site <i>Reduced Capacity</i>	30	2,551
<i>Closed</i> High-Quality Site	86	4,109
No Change in Rating or Capacity	99	10,442

*Capacity represents 2020 capacity with the exceptions of Closed High-Quality Sites. Capacity for this subgroup is 2014 capacity.

From 2014 to 2020, nearly twice as many sites contributed to high-quality expansion than contributed to reductions (228 vs. 117 sites). While the number of newly opened high-quality sites was nearly equal to the number that closed (95 vs. 86), the total capacity across all newly opened high-quality sites was nearly twice the total across all sites that closed (7,014 vs. 4,109). The majority of high-quality capacity growth came from sites that increased their rating.

Figures 3 and 4 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.

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 effective 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 Fox Chase/Oxford Circle, Juniata, and Oak Lane/Olney, and Mifflin Square. The largest declines occurred in Central and Western North Philadelphia, Point Breeze, and Mantua/West Powelton.

⁴ 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>).

Figure 3: Changes in Status of High-Quality Centers & Changes in Block Group-Level Supply Estimates for High-Quality Child Care (2014 to 2020)

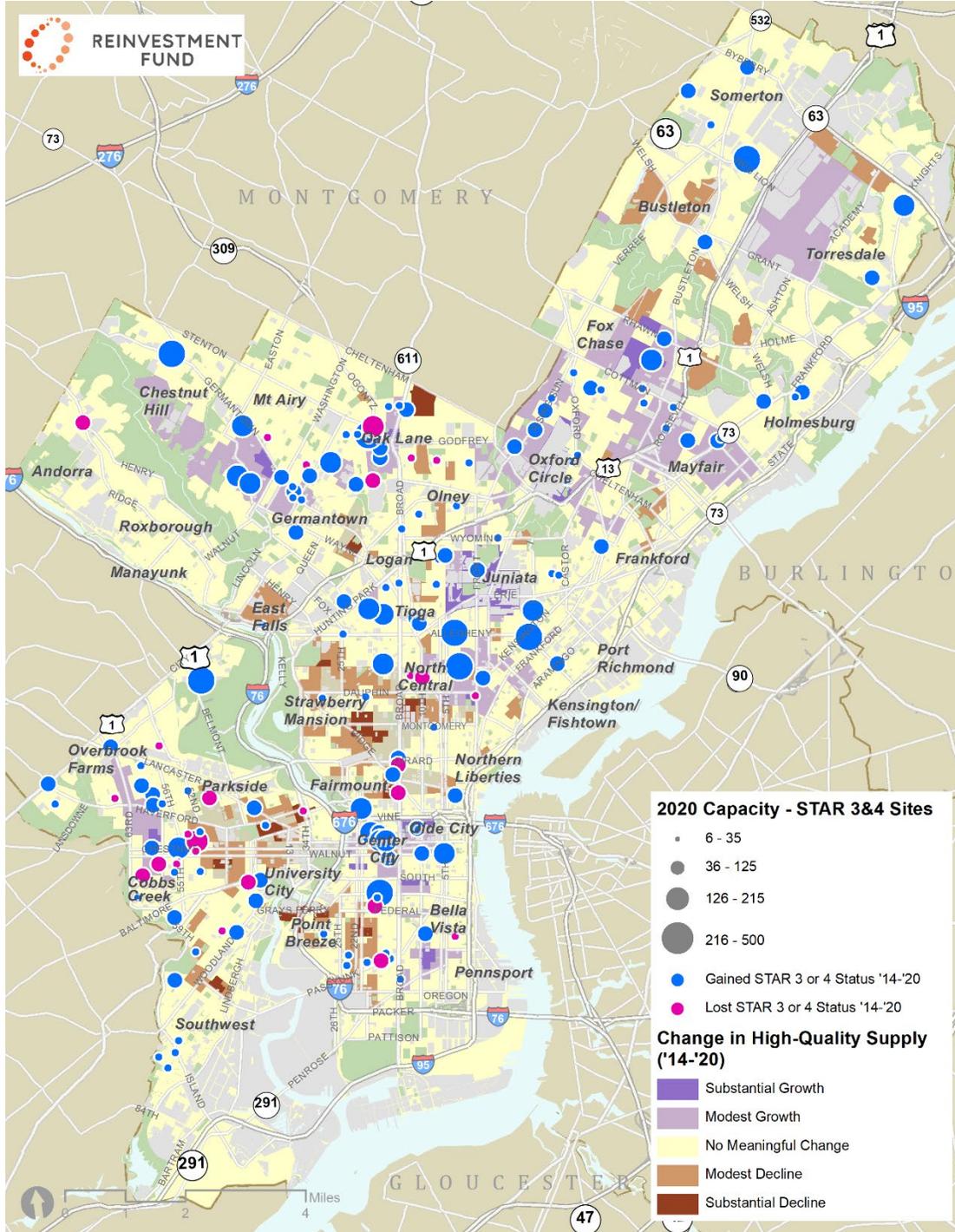


Figure 3:

- Only sites for which there was a change in status are reflected on this map.
- Purple represents increases in high-quality supply; brown represents declines in high-quality supply.
- Blue circles represent childcare sites that increased their rating to high-quality status between 2014-20.
- Pink circles represent childcare sites that reduced their rating to below high-quality status between 2014-20.
- The size of the circles represents the 2020 capacity of the facility.

Figure 4: Changes in Capacity at High-Quality Centers & Changes in Block Group-Level Supply Estimates for High-Quality Child Care (2014 to 2020)

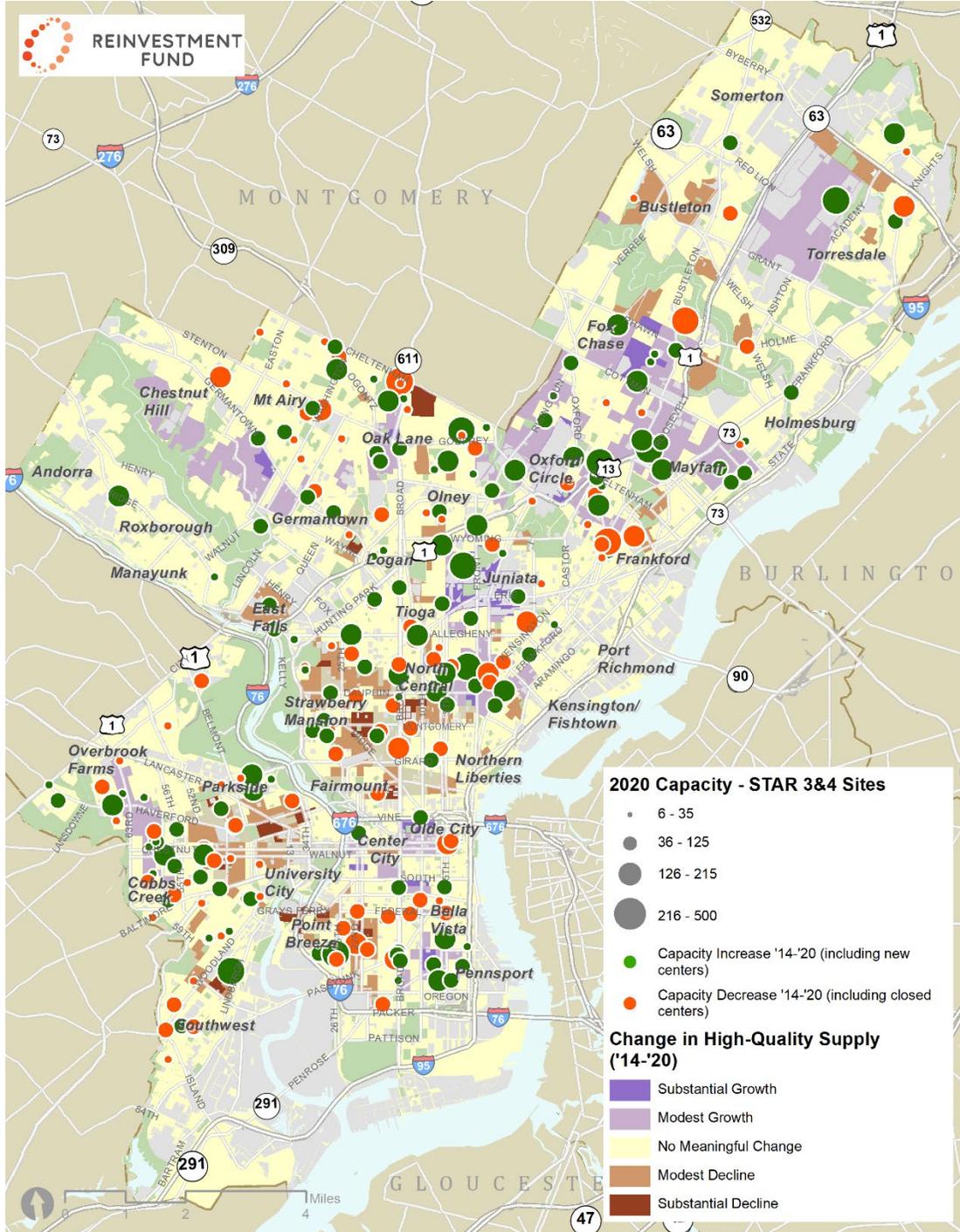


Figure 4:

- Only sites for which there was a change in capacity are reflected on this map.
- Purple represents increases in high-quality supply; brown represents declines in high-quality supply.
- Green circles represent high-quality childcare sites that increased capacity between 2014-20.
- Orange circles represent high-quality childcare sites that reduced their capacity between 2014-20.
- The size of the circles represents the 2020 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 2020 (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 2020, there was an estimated population of 104,707 children under age five living in Philadelphia, a small decline from 2019. This number represents 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 childcare options near their work.⁵ These adjustments suggest that 17,117 resident children traveled with adults to child care located outside the city near a parent’s place of work, while 19,913 children who live outside the city travel with parents to child care in the city, yielding a *maximum potential demand* of 107,503 for child care in Philadelphia.

Maximum potential demand declined slightly between 2019 and 2020, by 3% (3,152). This is the second year in a row where our estimated maximum potential demand has declined, although overall levels of demand are still higher than in 2014. Note that our estimates of demand for 2020 do not account for substantial disruptions in the childcare market and commuting patterns that occurred as a result of COVID-19, nor household moves that may have been spurred by the pandemic.

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.⁶ 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 low, relative to demand. With a total demand of roughly 107,503 and a total supply of 97,889, about 9% of maximum potential demand was unmet in 2020 (i.e., a citywide absolute shortage of 9,615 seats) compared to more than 16% of demand unmet in 2014 and about 11% of demand in 2019. The *absolute shortage* is much greater for high-quality seats to 73,605 for high-quality seats. Although this shortage is still substantial, it has been declining over time. High-quality seats met 32% of demand in 2020, compared to only 21% in 2014, and 30% in 2019 (See Table 4).

⁵ 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.

⁶ 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

	2020	2019	2014
Absolute Shortage in Total Childcare Seats	9,615	12,713	17,548
Absolute Shortage in High-Quality Seats	73,605	77,800	85,076
Percentage of Maximum Potential Demand Met by All Seats (Supply)	91%	89%	84%
Percentage of Maximum Potential Demand Unmet by All Seats (Shortage)	9%	11%	16%
Percentage of Maximum Potential Demand Met by High-Quality Seats (Supply)	32%	30%	21%
Percentage of Maximum Potential Demand Unmet by High-Quality Seats (Shortage)	68%	70%	79%

Relative Shortage in Total Childcare Supply

Areas with the most severe *relative shortages* in total childcare seats in 2020 were concentrated along the Delaware River near Kensington and Port Richmond, in Greys Ferry, and throughout the Northeast (see Figure A2).

Relative Shortage in Certified Supply

Areas with the most severe *relative shortages* in certified seats in 2020 were concentrated in Mt Airy, Center City and Callow Hill, Southwest, South Philadelphia, Overbrook Farm (see Figure A2).

Relative Shortage in High-Quality Supply

Areas with the most severe *relative shortages* in high-quality seats in 2020 were in parts of Northwest Philadelphia – Roxborough/Manayunk, parts of Germantown and Olney; Overbrook Farms; and a handful of Northeast neighborhoods (see Figure A3).

Summary

The 2020 analysis captures the conditions in the city's childcare market on the precipice of a major disruption. While the long-term impacts of COVID-19 on childcare operators' business models and parents' childcare preferences are still unknown, in the short-term the pandemic resulted in many operators closing temporarily (or permanently) and others scaling back capacity to comply with city's mandated restrictions. Our 2021 analysis will include a much deeper dive into the impact of the pandemic on supply and a supplemental analysis of how the pandemic affected parents' use of subsidized care as a key indicator of changing demand.

Even with these caveats, the 2020 analysis highlights that ongoing challenges exist for families seeking high-quality child care in many of Philadelphia's neighborhoods and job centers. While the city has continued to make strides expanding licensed supply and high-quality capacity since 2014, the level of high-quality supply in the city is still only sufficient to serve 32% of the estimated maximum potential demand. Large shortages continue to persist in specific city neighborhoods, even as targeted investments continue.

Appendix A: Additional Maps and Tables

Figure A1: Certified and Uncertified Childcare Sites (2019)

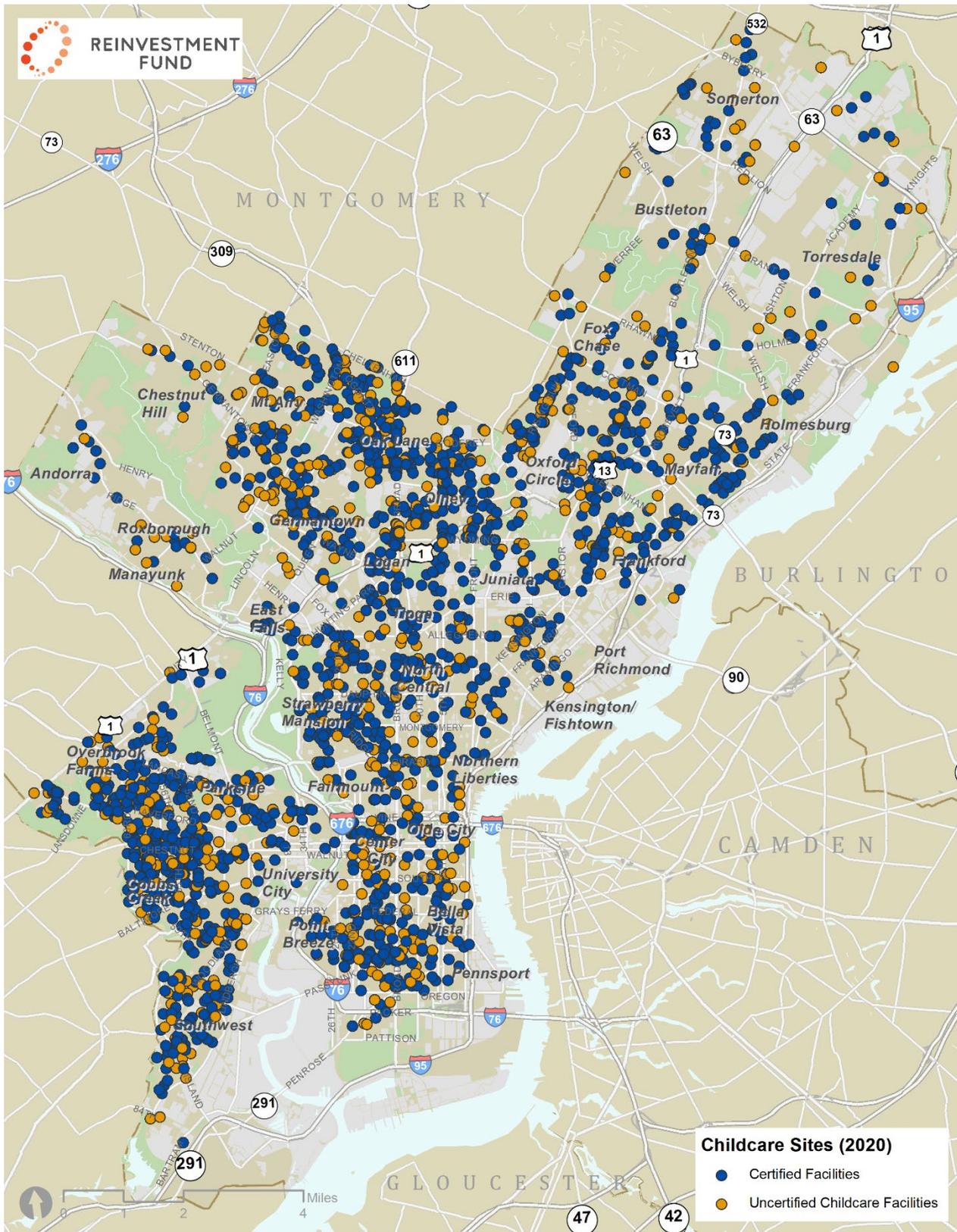


Figure A2: Relative Gap – Total Childcare Supply (2020)

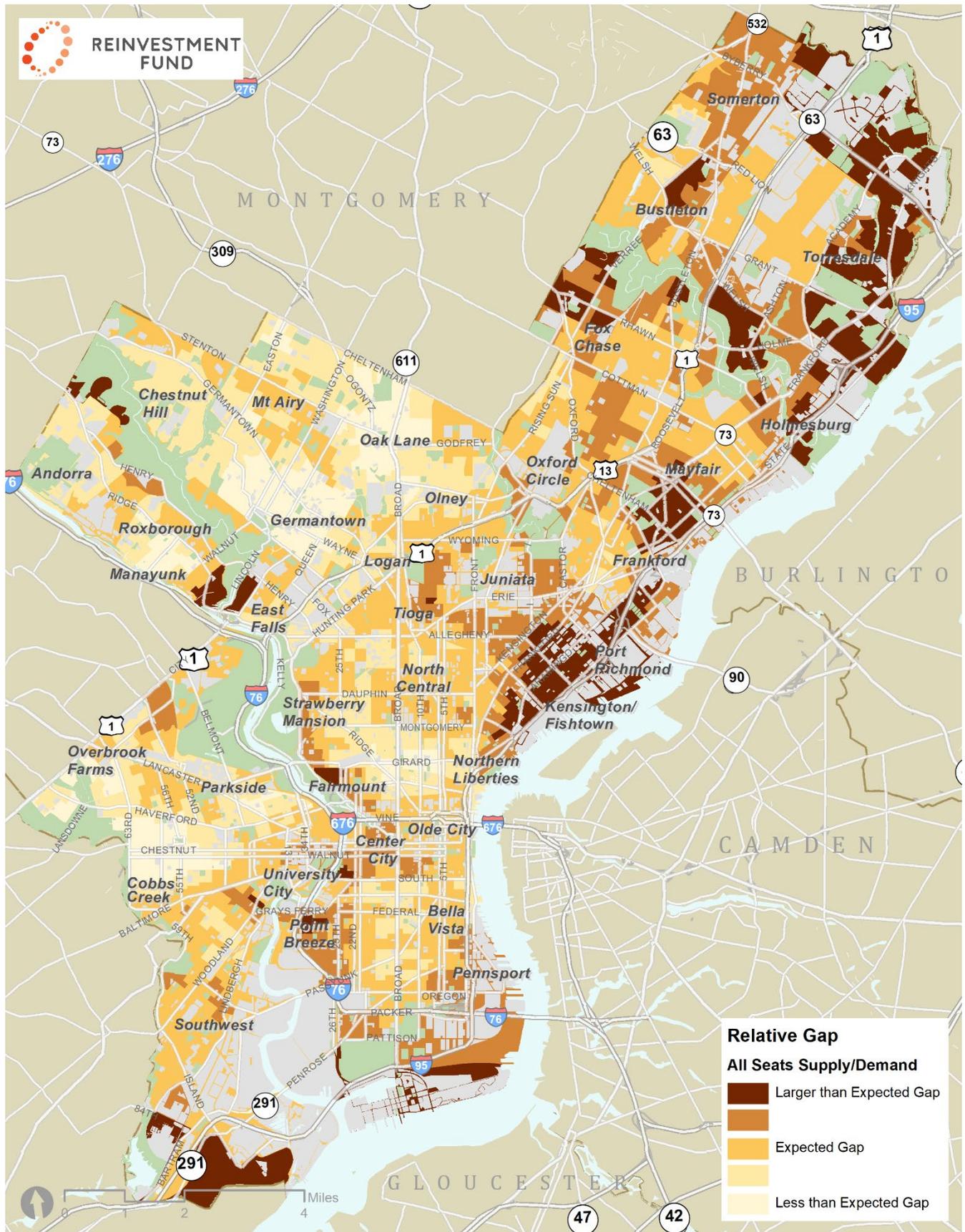


Figure A3: Relative Gap – Certified Childcare Supply (2020)

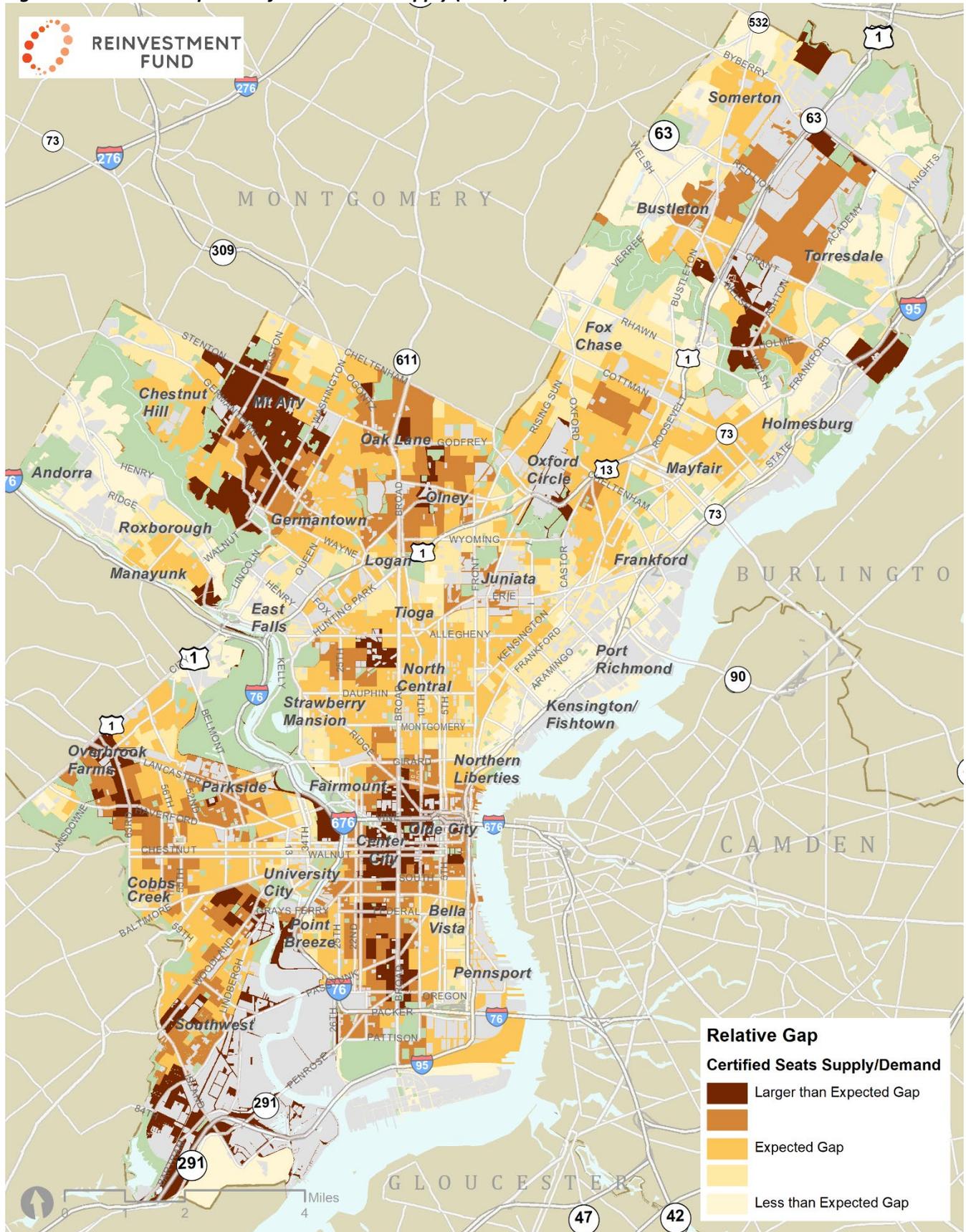
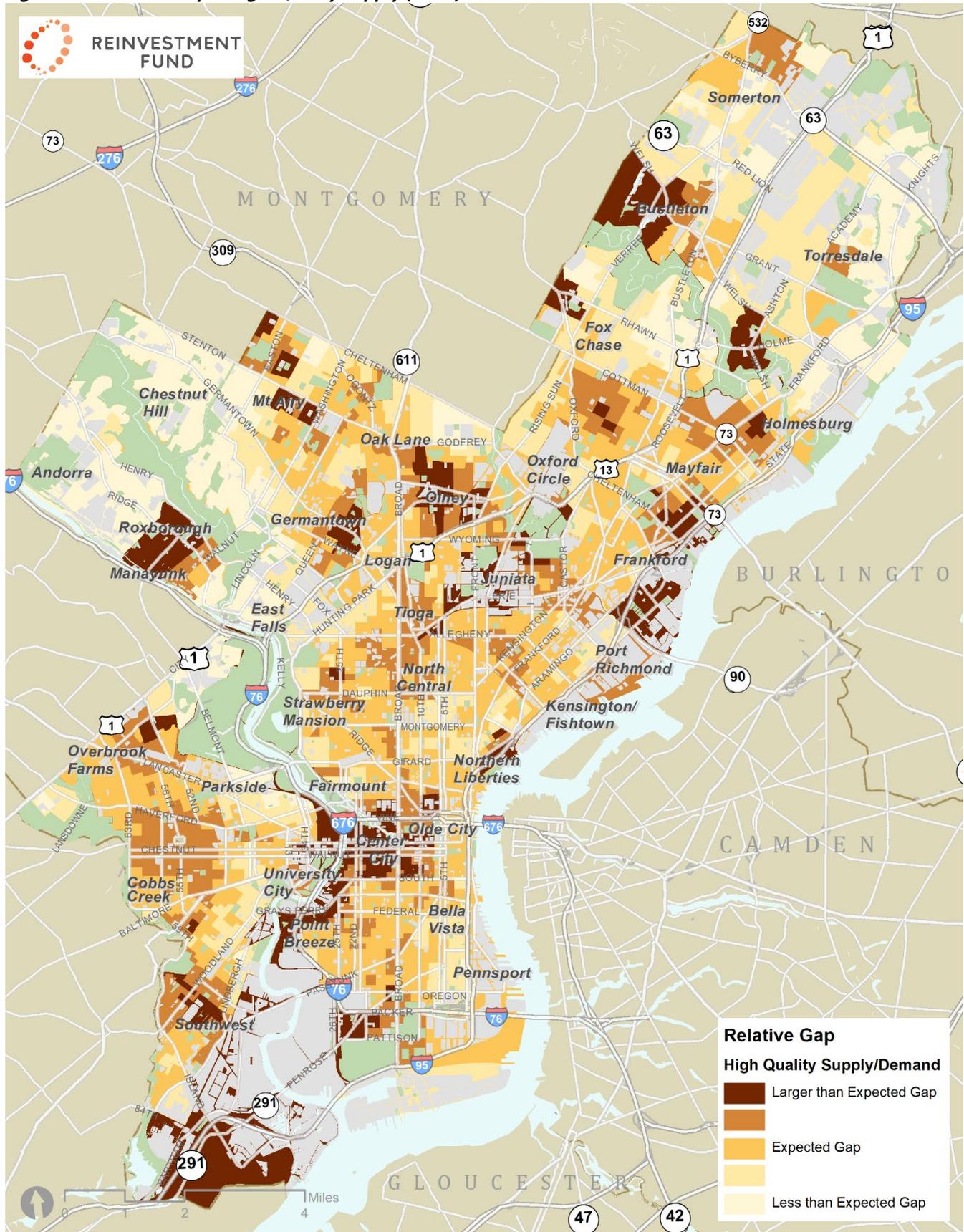


Figure A4: Relative Gap – High-Quality Supply (2020)



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