



REINVESTMENT
FUND

2014
2024

**EXPANDING ACCESS TO
HIGH-QUALITY EARLY
CHILDHOOD EDUCATION:**
Direct and Indirect Effects of the
Fund for Quality in Philadelphia

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ABOUT REINVESTMENT FUND

Reinvestment Fund is a mission-driven financial institution committed to making communities work for all people. We bring financial and analytical tools to partnerships that work to ensure that everyone has access to essential opportunities: affordable places to live, access to nutritious food and health care, schools where their children can flourish, and strong, local businesses that support jobs. We use data to understand markets, communities, and impediments to opportunity—and how investment and policy decisions can have the most powerful impact. Since our inception in 1985, Reinvestment Fund has provided over \$3.2 billion in financing to strengthen neighborhoods, scale social enterprises, and build resilient communities.

Reinvestment Fund's Policy Solutions team partners with civic leaders across the country to support strategic decision-making to strengthen communities. Our rigorous research and analytic tools help stakeholders implement effective interventions and address entrenched challenges.

Acknowledgements

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Executive Summary

The Fund For Quality (FFQ) launched in 2014 to increase access to high-quality early childhood education (ECE) in Philadelphia, in areas that need it most. FFQ provides grant dollars and technical assistance for high-quality programs to complete facility renovation or expansion projects that increase the number of children served in an existing or new location.

Childcare businesses operate in a complex marketplace. Individual providers compete for customers, and it is a market in which some families decide not to or are unable to participate. Some ECE programs are free and fully subsidized by tax dollars while others charge substantial tuition. Providers may be for-profit, nonprofit or public sector. Because there is not much research on the market dynamics of ECE, it was not clear what sort of impact FFQ interventions might have at the market level.

For example, the intention of FFQ was to increase the overall number of children enrolled in high-quality care. However, a potential unintended consequence might be enrollment declines in lower-quality or unrated programs, leading to business closures that reduce aggregate supply. Moreover, other ECE operators might avoid locating near better-resourced FFQ grantees, inhibiting market growth. This kind of competitive effect could leave areas around FFQ sites with fewer seats than before the intervention.

This paper investigates the impact of FFQ on access to high-quality care and the overall market for childcare in Philadelphia. Using descriptive and quasi-experimental approaches to measure the effect of FFQ, we find indications that FFQ likely had an overall positive impact on access to care and no clear evidence of FFQ investments leading to market contractions.



We find that:

- Over the period covered in this analysis, aggregate childcare capacity in Philadelphia declined, as did demand for care; in the areas immediately surrounding FFQ grantees, declines in capacity were offset by the expansion of FFQ funded programs.
- Both FFQ programs and other programs in their immediate vicinity added more new high-quality seats than the city average.
- Compared with other areas in Philadelphia that had similar levels of supply, census block groups with FFQ programs added more high-quality seats and increased high-quality market share at a greater rate.

In short, our findings suggest that FFQ investments likely impact access to high-quality care directly by expanding the capacity of FFQ grantees, and indirectly by signaling to nearby providers that the local market can support additional high-quality capacity.

The remainder of this paper describes overall market trends in the Philadelphia childcare market, trends in childcare supply in the areas immediately around FFQ grantees, and the results of a quasi-experimental design estimating the impact of FFQ funding on the supply and market share of high-quality programs.

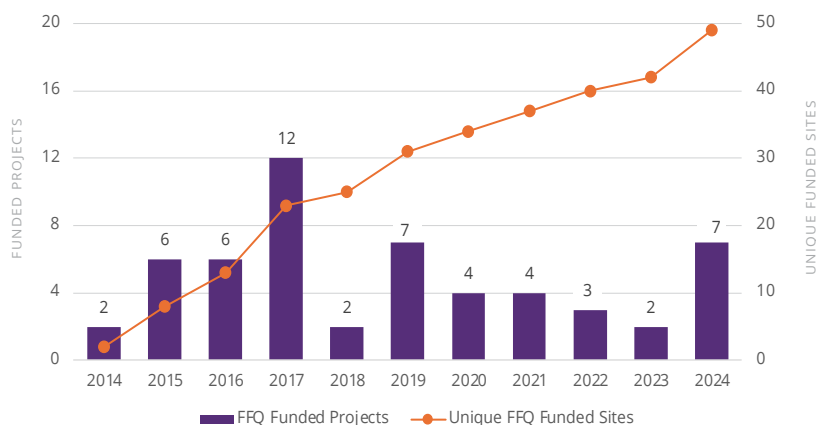
I: Background & Overview of Fund For Quality

FFQ, supported by the William Penn Foundation and Vanguard Strong Start for Kids, is a partnership between Reinvestment Fund, a community development financial institution, and Public Health Management Corporation (PHMC), a community health nonprofit. The program provides business planning, facility grants, and financing for high-quality childcare programs in Philadelphia to expand their capacity and serve more children¹.

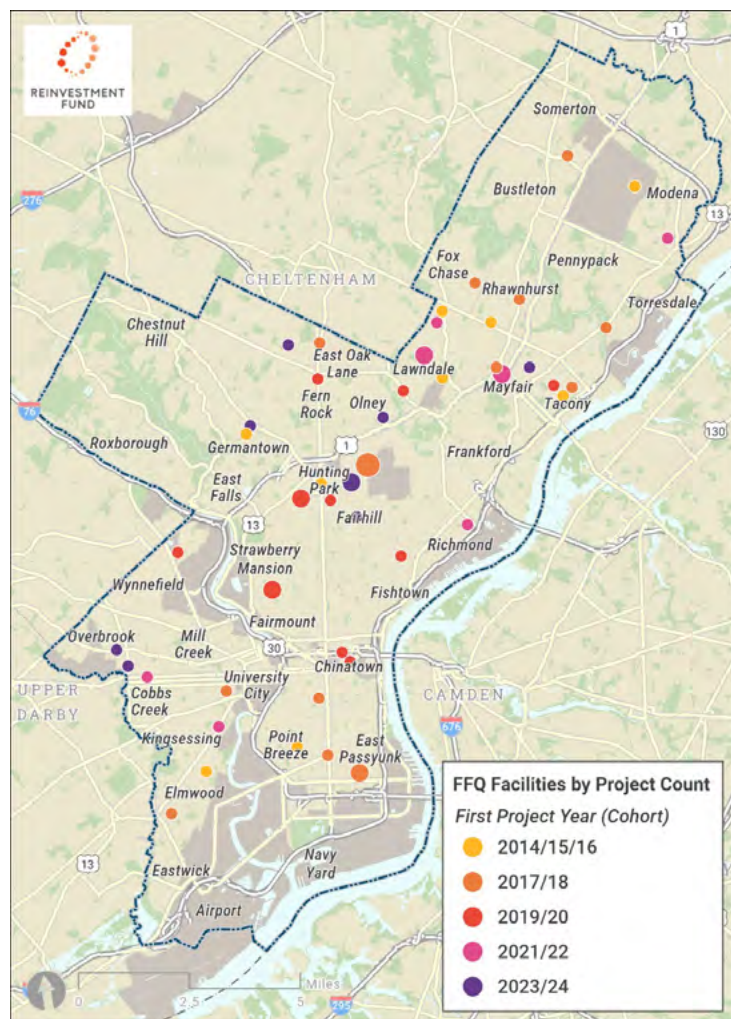
FFQ participants receive a six to twelve-month planning grant that pays for coaching and technical assistance (TA) to help the provider develop a business expansion plan. Coaching and TA topics include financial planning and management, staffing and organizational planning, space design, and construction management². Upon successful completion of the planning phase, providers receive a capital grant, generally up to \$300,000, to support their expansion project. Grant proceeds can add more capacity to the program's existing site or be used to open a new facility in a high need area. Figure 1 shows the number of projects funded in each program year (totaling 55 from 2014 through 2024) and the cumulative number of unique childcare facilities (49 through 2024). Six providers received FFQ grants in multiple years. Map 1 shows the locations of the 49 facilities.

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1. FFQ considers programs that receive a STAR 3 or STAR 4 rating from Pennsylvania's Keystone STARS rating system to be high-quality. Participation in the STARS program is optional for a small number of providers. For the purposes of FFQ, and this paper, providers that participate in Head Start or School District of Philadelphia programs and are exempt from STARS are also considered high-quality.
 2. More details about the role of TA are included in our companion report, which features the results of interviews with FFQ and other ECE stakeholders.

Figure 1: Completed FFQ Projects Each Year and Cumulative Number of Unique FFQ-Supported Facilities, 2014 to 2024



Map 1: Locations and Time Period of FFQ-funded Facilities



The program only funds high-quality providers, a designation based on Pennsylvania’s Quality Rating and Improvement System (QRIS), called Keystone STARS. The STARS program rates providers on a one to four scale based on a variety of factors. FFQ defines high-quality as programs earning three or four stars.

A key characteristic of FFQ is a focus on high need areas. To that end, the allocation of program resources is informed by a citywide analysis of childcare supply and demand at the census block group level³. The annual analysis, published on www.childcaremap.org, classifies census block groups into categories based on their level of access to childcare. Priority for program funding is given to projects in areas with shortages of high-quality care⁴.

³. Block groups are census-defined geographies that are smaller than a census tract, with populations ranging from 600 to 3,000 people.

⁴. For more information about the Childcare Map analysis, see: www.childcaremap.org

II: Trends in Philadelphia's Childcare Market, 2013 to 2024

The data for this analysis come from a longitudinal dataset developed by Reinvestment Fund through the course of annual updates to the childcare gap analysis, first completed in 2014. The dataset contains every full-time childcare program operating in Philadelphia, both licensed and unlicensed, in the years 2013 through 2024. The analysis was not conducted in 2015. For each site in the dataset, information about the program's licensed capacity, quality rating, and location are recorded in each year.

Along with this supply data, the analysis includes an estimation of demand for childcare among children under the age of five in each census block group in the city. The estimate of childcare demand accounts for both resident children (i.e., those living in each block group), as well as commuters (i.e., children travelling with parents to an area for work).

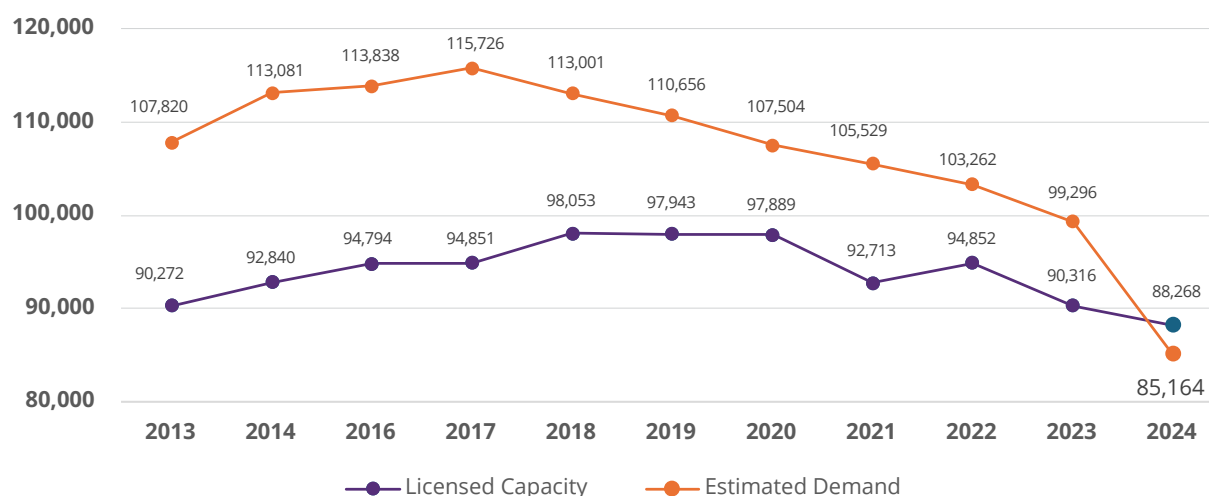
For more information about the childcare gap analysis, and how the dataset is constructed, see: <https://www.reinvestment.com/childcaremap/pdfs/full.pdf>

OVERALL TRENDS IN PHILADELPHIA'S CHILDCARE MARKET

Philadelphia's childcare market experienced substantial changes over the time period covered in this analysis. Between 2013 and 2018, overall licensed capacity in the city grew from 90,272 to just over 98,053. After plateauing, a decline was accelerated by the COVID-19 pandemic (the data reflects provider status in May of each year; the 2020 dataset thus did not reflect the pandemic's full impact in its first year). In 2024, licensed capacity across the city was 88,268—a 2,000 seat decline from 2013.

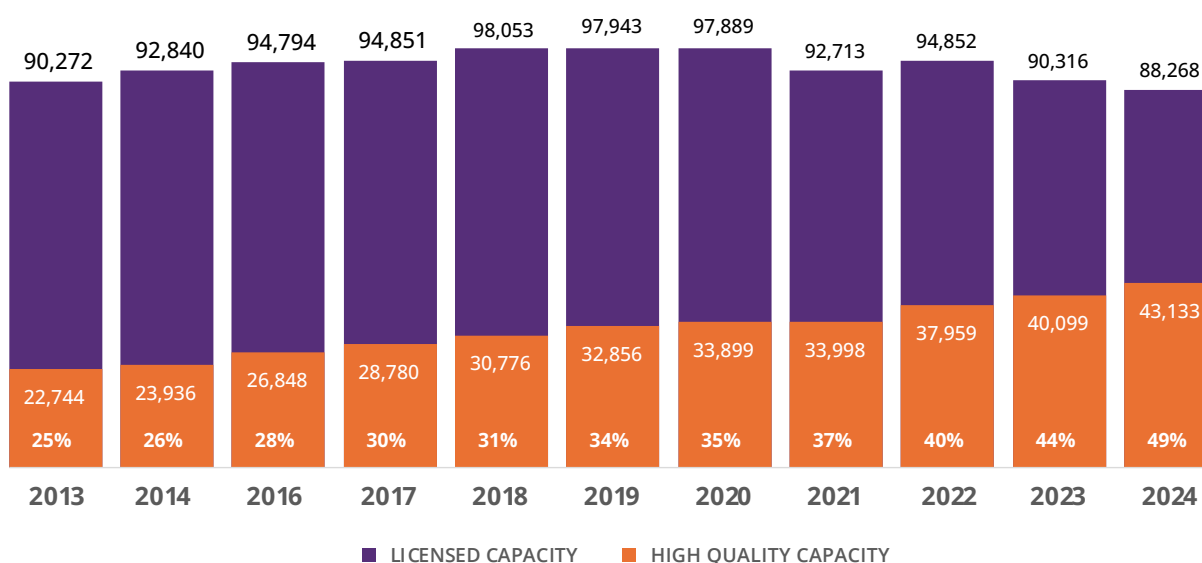
The trend in estimated childcare demand is similar but evidences a much steeper decline following the pandemic. Demand peaked in 2017 at 115,726 and declined each year since, falling to 85,164 in 2024 – the first year in which supply has exceeded demand.

Figure 2: Licensed Capacity and Estimated Demand for Childcare, 2013 to 2024



Although overall capacity and demand have been in decline, the licensed capacity in high-quality programs has grown steadily. In 2013, 25% of the city's licensed capacity was in high-quality programs. By 2024, the number of high-quality seats had increased by over 20,000, and overall high-quality market share across the city increased to 49% (see Figure 3, below). FFQ supported sites accounted for roughly 7,000 high-quality seats; roughly 35% of the high-quality seats added citywide between 2014 and 2024.

Figure 3: Licensed Capacity, High-Quality Capacity, and High-Quality Market Share, 2013 to 2024



Some of the growth in the city's high-quality childcare sector is an artifact of changes in the STARS rating system. Changes implemented in 2017 updated the criteria for existing programs to achieve a STAR 3 or STAR 4 rating⁵. Over the same time period the city also benefitted from new resources to support providers as they work to improve their quality ratings. The creation of the PHLpreK program, for example, subsidized seats in high-quality programs across the city, supporting the addition of thousands of seats.

FFQ INTERVENTIONS AND PROGRAM COHORTS

To simplify the analysis in this report, FFQ projects were grouped into five cohorts, each containing two years of FFQ grantees. Grantees and facilities that received multiple rounds of funding were included in the cohort during which their first project took place.

Although most cohorts contain two years of FFQ grantees, the first cohort contains three—grantees from 2014, 2015, and 2016. The two FFQ grantees in 2014, the first year of the program, did not start operating until 2015. Figure 4 summarizes each cohort.

Cohort Name	Cohort Start Year	Unique FFQ Facilities
Cohort 2015/16	2014	13
Cohort 2017/18	2016	12
Cohort 2019/20	2018	9
Cohort 2021/22	2020	6
Cohort 2023/24	2022	9

5. For more information about the impact of changes to Keystone Stars, see: "Understanding How Changes to Keystone STARS Ratings Will Affect Gaps in the Supply of High-Quality Child Care" (<https://goo.gl/hSb2nX>)

III: Description of Market Changes Around FFQ Grantees

This section describes how supply and quality in the childcare market near FFQ grantees changed after the intervention. The analysis uses a quarter-mile radius around each FFQ site to approximate the potential area of influence. In Philadelphia, a quarter mile represents approximately three city blocks or a five-minute walk.

Overall, we find that areas with FFQ projects fared better than the rest of the city. These areas added seats while overall capacity was declining citywide, and these areas expanded the market share of high-quality seats faster than the rest of the city.

CHANGE IN TOTAL LICENSED CAPACITY

Over the period covered in this analysis, the city experienced an overall decline in the total number of childcare seats. This section compares the change in childcare seats around FFQ projects.

Figure 5 shows the average change in licensed capacity in the areas around FFQ projects for each cohort between that cohort's start year and 2024. Changes are calculated both excluding capacity in FFQ-funded sites and including capacity in those sites. Changes in FFQ areas are compared with the citywide trend over the same time period. The data show that the FFQ intervention helped offset the loss of childcare capacity in areas around FFQ sites.

Examining only providers that did not receive FFQ funding, we find that in three of the five FFQ cohorts, areas around FFQ projects experienced a decline similar to the rest of the city. In the 2019/2020 and 2023/2024 cohorts, the decline in capacity was about twice the citywide trend.

Notably, in the first four cohorts, the loss of seats was entirely offset when the seats funded by FFQ are included. In the most recent cohort, 2023/2024, the inclusion of new FFQ funded seats reduced the decline from twice the city trend (13%) to less than half the city trend (3%). As a result, when expansion projects funded by FFQ are included, the areas surrounding FFQ projects actually gained seats or had smaller declines, on average, during a time when the city overall experienced a decline.

Figure 5: Change in Average Licensed Capacity Around FFQ Sites, by Cohort and Grantee Type, Start Year to 2024

Change in Licensed Capacity (Start Year to 2024)				
FFQ Cohort	FFQ Sites	Citywide Trend	FFQ Areas (Excluding FFQ)	FFQ Areas (Including FFQ)
Cohort 2015/2016 (Starting 2014)	13	-4,572 (-5%)	-3 (-1%)	+67 (+23%)
Cohort 2017/2018 (Starting 2016)	12	-6,526 (-7%)	-8 (-4%)	+91 (+31%)
Cohort 2019/2020 (Starting 2018)	9	-9,795 (-10%)	-59 (-21%)	+30 (+9%)
Cohort 2021/2022 (Starting 2020)	5	-9,621 (-10%)	-16 (-6%)	+79 (+29%)
Cohort 2023/2024 (Starting 2022)	7	-6,584 (-7%)	-55 (-13%)	-13 (-3%)

SEE APPENDIX FOR ADDITIONAL TABLES OF FINDINGS.

CHANGE IN HIGH-QUALITY CAPACITY

The primary goal of the FFQ program is to increase high-quality capacity. Over the period covered in this analysis, the overall capacity in high-quality programs citywide increased. The areas surrounding FFQ projects also saw increases in high-quality capacity, with the rate of growth and change in market share matching, or outpacing, citywide trends.

In the areas surrounding FFQ projects, the amount of high-quality capacity increased both as a direct result of FFQ investments (i.e., FFQ-funded providers added new high-quality seats), and as a result of programs increasing their ratings and adding capacity without FFQ funding. In fact, in four of the five cohorts, providers near FFQ projects who did not receive FFQ funding added new high-quality seats at a rate that was nearly double the citywide trend.

Figure 6 shows the average change in seats and the average rate of change (in parentheses) in high-quality capacity in the areas around FFQ projects for each cohort between each cohort's start year and 2024. Changes are presented for the city and in FFQ areas, both with and without FFQ-funded seats.

The findings in the Figure 6, mirror those from a 2019 report, which found that FFQ investments may have positive spill-over effects on the high-quality capacity of nearby sites *that did not receive FFQ investments*⁶. While the findings below are purely descriptive, the next section of this report tests the statistical significance of these findings.

Figure 6: Change in Average High-Quality Capacity Around FFQ Sites, by Cohort and Grantee Type, Start Year to 2024

Change in High-Quality Capacity (Start Year to 2024)				
FFQ Cohort	FFQ Sites	Citywide Trend	FFQ Areas (Excluding FFQ)	FFQ Areas (Including FFQ)
Cohort 2015/2016 (Starting 2014)	13	+19,197 (+80%)	+70 (+80%)	+163 (+163%)
Cohort 2017/2018 (Starting 2016)	12	+16,285 (+61%)	+98 (+146%)	+147 (+111%)
Cohort 2019/2020 (Starting 2018)	9	+12,357 (+40%)	+89 (+148%)	+141 (+97%)
Cohort 2021/2022 (Starting 2020)	5	+9,234 (+27%)	+94 (+664%)	+126 (+168%)
Cohort 2023/2024 (Starting 2022)	7	+5,174 (+14%)	+22 (+32%)	+46 (+23%)

SEE APPENDIX FOR ADDITIONAL TABLES OF FINDINGS.

Another way to examine the change in high-quality capacity is to look at the change in market share: the proportion of all seats in high-quality providers. Over the period of this analysis, the high-quality market share increased overall, but in areas around FFQ programs high-quality market share increased at a faster rate than the city, even when programs funded by FFQ are excluded. These results add further support to the notion that providers respond to FFQ projects by improving their own ratings.

Figure 7 shows the average percentage point change in high-quality market share for each cohort both including and excluding FFQ funded projects.

6. See: Rosch, Jacob, Michael Norton, and Kevin Reeves. "Data Driven Investments in Early Childhood Education are Making a Difference for Philadelphia Families, Small Businesses and Neighborhoods" (2021). <https://www.reinvestment.com/insights/data-driven-investments-in-early-childhood-education-are-making-a-difference-for-philadelphia-families-small-businesses-and-neighborhoods/>

Figure 7: Percentage Point Change in Average High-Quality Market Share (Seats in High-Quality Providers) Around FFQ Sites, by Cohort and Grantee Type, Start Year to 2024

Change in High-Quality Market Share (Start Year to 2024)				
FFQ Cohort	FFQ Sites	Citywide Trend	FFQ Areas (Excluding FFQ)	FFQ Areas (Including FFQ)
Cohort 2015/2016 (Starting 2014)	13	+23%	+46%	+39%
Cohort 2017/2018 (Starting 2016)	12	+21%	+23%	+28%
Cohort 2019/2020 (Starting 2018)	9	+18%	+32%	+35%
Cohort 2021/2022 (Starting 2020)	5	+14%	+15%	+30%
Cohort 2023/2024 (Starting 2022)	7	+9%	+11%	+10%

SEE APPENDIX FOR ADDITIONAL TABLES OF FINDINGS.

IV: Measuring Effects of FFQ Investments

The descriptive findings in the previous section suggest that conditions around FFQ grantees improved after the implementation of FFQ. Although the total licensed capacity in childcare was declining citywide, the addition of seats in FFQ providers helped these areas increase licensed capacity. Additionally, the number of new high-quality seats in areas around FFQ providers increased at a rate that was higher than the rest of the city.

These descriptive results mirror findings from the 2019 study examining the direct impacts of FFQ investments on the number and market share of high-quality seats near FFQ supported sites. Another important finding from the 2019 study

suggested that FFQ investments may also have positive spill-over effects on the high-quality capacity of nearby sites that did not receive FFQ investments.

To further understand these indirect impacts of FFQ investments, we updated the 2019 analyses to compare the changes in areas where FFQ investments were made with the changes in other similar areas where there were no FFQ investments. The 2024 analyses yielded similar results.

Even after FFQ-supported seats are removed, neighborhoods with FFQ-supported sites experienced greater gains than other similar neighborhoods that did not receive FFQ investments by the following measures:

- The number of high-quality seats available.
- The market share of available seats that are high-quality.

CREATING EQUIVALENT FFQ AND COMPARISON GROUPS

The analyses in this section rely on a quasi-experimental design using propensity score matching to compare block groups with FFQ interventions to similar block groups without the intervention.

Propensity score matching approximates the conditions of a “true experiment” by creating equivalent treatment and control groups. These groups can then be compared on key metrics before and after an intervention. Propensity score matching selects a comparison group by estimating how similar potential matches are to the study group based on researcher-defined characteristics. For this analysis, block groups selected as matches for FFQ block groups were as similar as possible along the following block group-level measures: total sites; total seats; share of seats that are high-quality; and demand for childcare (see Figure 8, below). Differences between these equivalent groups along key outcomes represent the impact of an intervention – in this instance, an FFQ investment.

For each FFQ intervention, we followed a similar method to the one used in the previous section. Each block group where an ECE facility was located was assigned to a two-year cohort. For each block group with an FFQ grantee, propensity score matching identified three block groups that did not have FFQ grantees, and which were statistically comparable to FFQ block groups in the year prior to the⁷ intervention. Matching was performed independently for each cohort.

Figure 8 describes the characteristics of FFQ and matched comparison block groups, and the variables used for identifying similar areas. None of the differences between FFQ and comparison block groups presented in Figure 8 were statistically significant.

Figure 8: Average Characteristics of FFQ and Comparison Block Groups by Cohort in Year Prior to Intervention

Cohort	Start Year	Comparison Groups	Unique Block Groups	Average Childcare Sites	Average Childcare Capacity	Average High-Quality Capacity	Share High-Quality Capacity	Average Childcare Demand
Cohort 2015/2016	2014	FFQ Area	11	3.8	192	128	59%	143
		Comp Areas	25	2.8	182	107	62%	227
		All Other Areas*	971	2.3	67	13	9%	80
Cohort 2017/2018	2016	FFQ Area	12	3.4	213	102	44%	90
		Comp Areas	32	3.4	178	86	44%	79
		All Other Areas	971	2.2	68	14	10%	83
Cohort 2019/2020	2018	FFQ Area	9	5.2	290	118	23%	162
		Comp Areas	21	4.3	250	105	25%	92
		All Other Areas	971	1.9	68	16	11%	84
Cohort 2021/2022	2020	FFQ Area	5	2.6	84	55	50%	106
		Comp Areas	13	1.8	55	30	53%	80
		All Other Areas	971	1.8	55	30	13%	80
Cohort 2023/2024	2022	FFQ Area	8	3.1	167	91	58%	80
		Comp Areas	21	3	117	84	57%	75
		All Other Areas	971	1.8	65	20	15%	76

^High-quality capacity was not used in matching but is presented here to further establish the equivalence between FFQ and comparison block groups on this key metric.

*All Other Areas serve as a reference group of Philadelphia block groups that were not included in the FFQ or the Comparison block groups across any of the five cohorts.

7. Three comparison block groups were selected for each FFQ block group, with replacement. This means that an individual block group could be selected as a comparison block group for more than one FFQ block group in each cohort. This improves the quality of matches, while maintaining a large enough comparison group to make meaningful comparisons to FFQ block groups. In each cohort the number of comparison block groups is not three times larger than the FFQ block groups due to individual comparison block groups being matched to more than one FFQ block group.

ASSESSING INDIRECT FFQ IMPACTS BY REMOVING FFQ INVESTMENTS

To assess the spillover effects of FFQ investments around FFQ grantees, we examined changes in high-quality capacity among providers that did not receive FFQ investments but were located in block groups that had at least one FFQ provider.

Comparisons between FFQ and comparison block groups were conducted to assess changes in: high-quality childcare capacity and the high-quality market share of total capacity. The difference between the average change in FFQ block groups and the comparison block groups approximates the indirect impact of FFQ investments.

The results point to a positive impact of FFQ on the childcare market and on access to high-quality care. These results also suggest that unintentional negative effects, like displacing other providers or crowding out other high-quality programs, are not playing out in FFQ block groups.

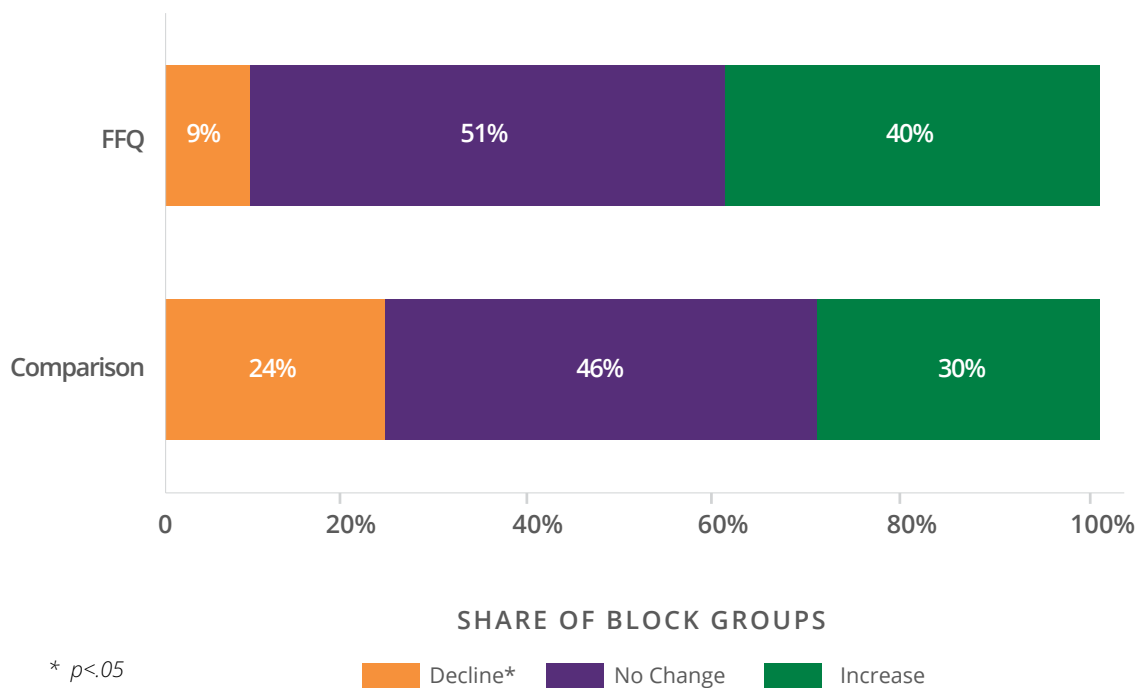
Finding #1:

Areas with FFQ Investments Added More High-Quality Capacity than Other Similar Areas

Our analysis found that non-FFQ providers located in FFQ block groups tended to have more high-quality seats in 2024 than they did in the year prior to FFQ investments, while over the same period fewer comparison block groups experienced gains in high-quality capacity.

Figure 9 presents the share of FFQ and comparison block groups that experienced increases, declines, or no change in high-quality capacity from the year prior to FFQ investments to 2024.

Figure 9. Share of Block Groups Experiencing Increases, Declines, or No Changes in High-Quality Capacity: FFQ v. Comparison Block Groups

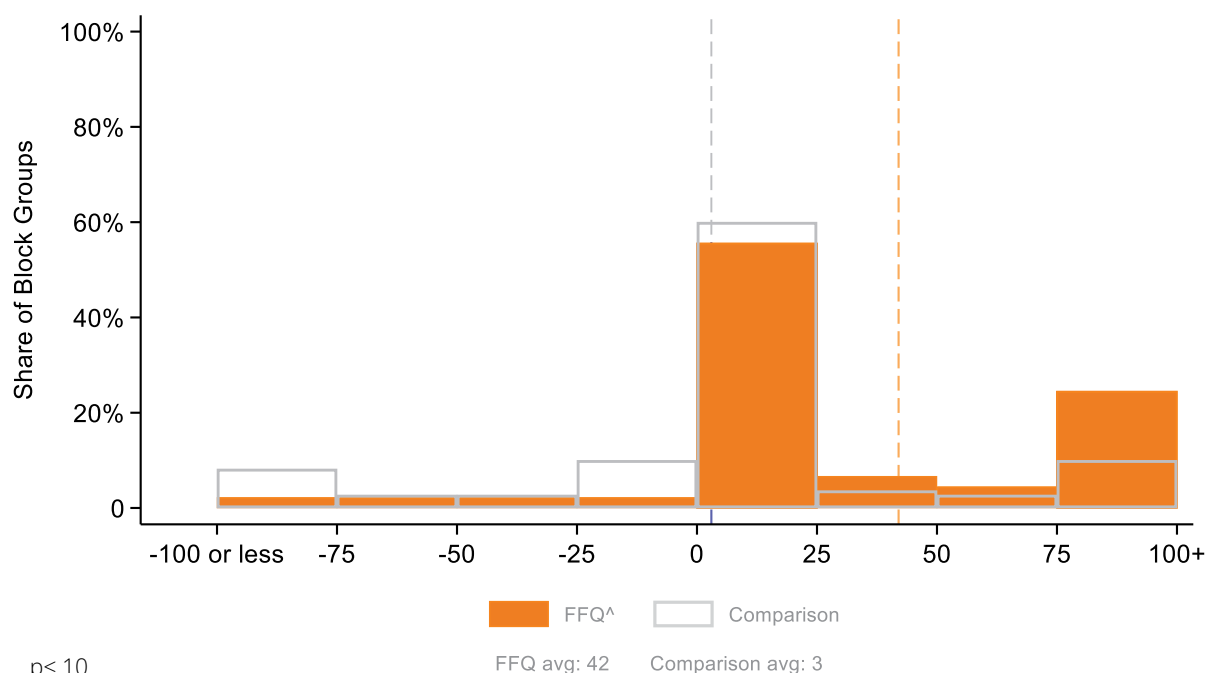


- A significantly greater share of comparison block groups experienced declines in high-quality capacity than FFQ block groups (24% v. 9%).
- A significantly greater share FFQ block groups experienced stability or increases in high-quality capacity than comparison block groups (91% v. 76%).

The differences observed in Figure 9 are primarily the result of declines in high-quality capacity in comparison block groups. While the share of FFQ block groups that experienced no change or an increase were greater than the comparison group, these differences were not statistically significantly⁸.

Figure 10 shows the distribution of changes in high-quality capacity in FFQ and comparison block groups from the year prior to FFQ investments to 2024, across all cohorts. The dotted lines in Figure 10 represent the average change in high-quality capacity in FFQ and comparison block groups. Even without the capacity that was directly fund by FFQ, FFQ block groups still added significantly more high-quality capacity than comparison areas, on average.

Figure 10: Change in ECE High-Quality Capacity in FFQ and Comparison Areas



p<.10

- FFQ block groups added a significantly greater amount of high-quality capacity than comparison block groups, on average: 42 v. 3⁹.
- A greater share of FFQ block groups experienced gains in high-quality capacity, and fewer FFQ block groups experienced declines in high-quality capacity than comparison block groups.

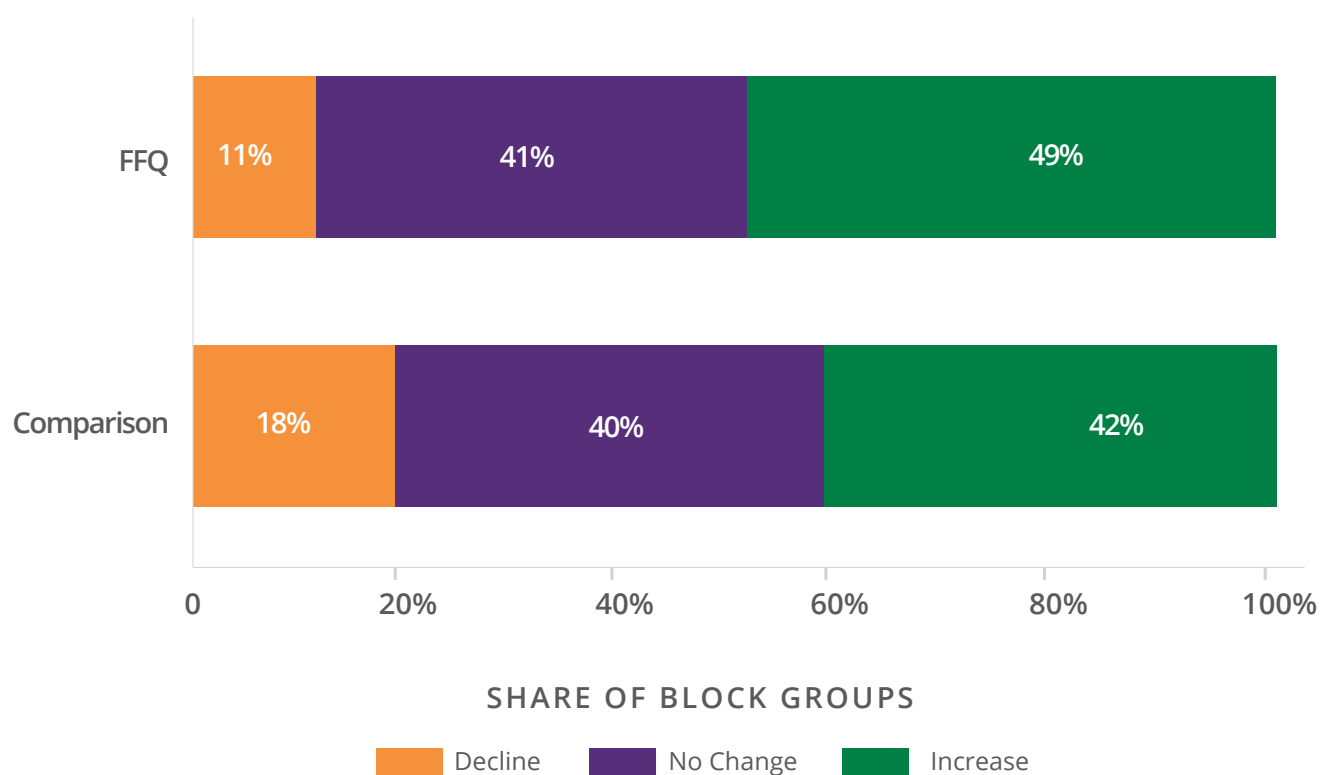
⁸. The small number of FFQ block groups (45) limits the ability to observe statistically significant differences between the FFQ and comparison block groups. The relationships observed in the change in high-quality seats in Figure 9 are also observable in individual cohorts of FFQ block groups (see Appendix).

Finding #2:

High-Quality Seats Make up a Greater Share of All Seats in FFQ-Supported Areas

In addition to experiencing increases in overall high-quality capacity, FFQ block groups also experienced larger improvements in high-quality market share than the comparison block groups. Figure 11 presents the share of FFQ and comparison block groups that experienced increases, declines, or no change in their high-quality market share from the year prior to FFQ investments to 2024.

Figure 11: Type of Change in High-Quality Market Share – FFQ v. Comparison Block Groups



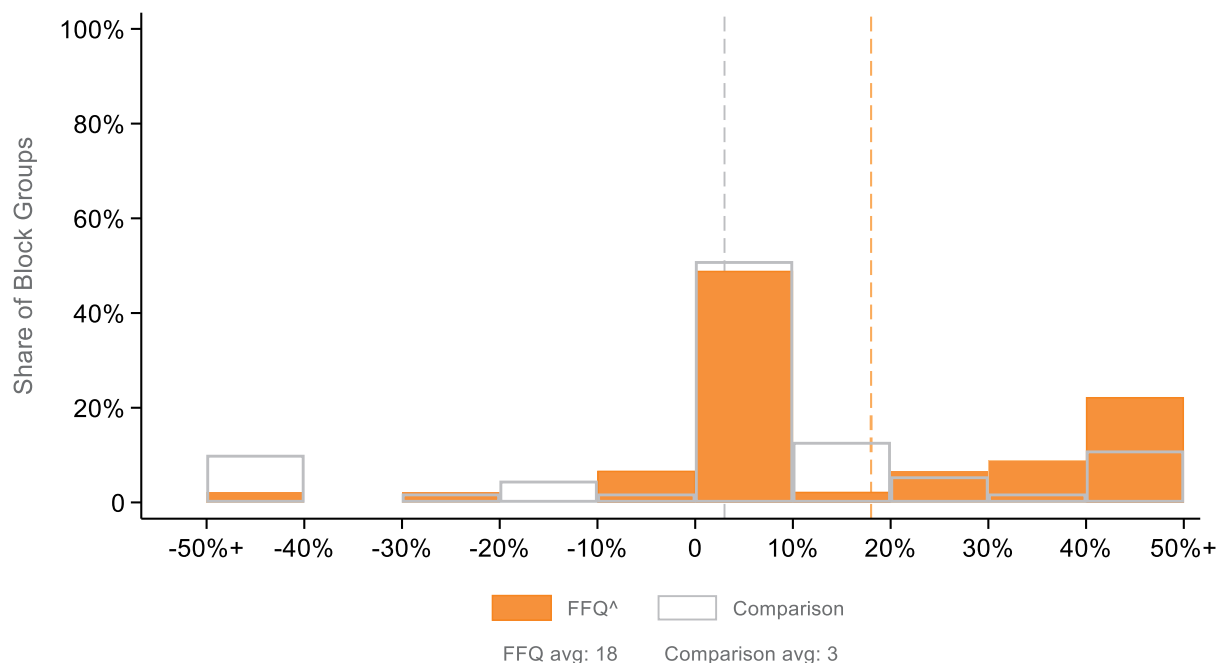
9. The equivalence of the FFQ and comparison groups established by the matching process allowed for the use of simple t-tests to assess the significance of the differences between the FFQ and Comparison block groups at their 'start year' and in 2024. Assessments of differences between FFQ and Comparison block groups were conducted cross sectionally, i.e., in the 'start year' and then in 2024, and for the change from 'start year' to 2024. Due to the small sample sizes within each FFQ cohort significance testing was conducted using multiple significance thresholds, ranging from 99.9% to 90% alpha levels.

- A greater share of FFQ block groups experienced increases (49% v. 42%), while a lower share of FFQ block groups experienced declines in high-quality market share than the comparison block groups (11% v. 18%); although these differences were not statistically significant.

However, overall improvements in high-quality market share in FFQ block groups were significantly greater, on average, than the comparison block groups¹⁰.

Figure 12 shows the distributions of changes in high-quality market share in FFQ and comparison block groups from the year prior to FFQ investments to 2024. The dotted lines in Figure 12 represent the average percentage point change in high-quality market share in FFQ and comparison block groups. Even without the new seats that were directly funded by FFQ, the high-quality market share in FFQ block groups still increased significantly more the high-quality market share in comparison block groups, on average.

Figure 12: Percentage Point Change in High-Quality Market Share – FFQ v. Comparison Block Groups



[^] p<.10

10. The relationships observed in the change in high-quality seats in Figure 11 are also observable in individual cohorts of FFQ block groups (see Appendix).

- High-quality market share in FFQ block groups increased by a significantly greater number of percentage points than the high-quality market share in comparison block groups, on average: 18 v. 3 percentage points.
- A greater share of FFQ block groups experienced gains in high-quality market share, and fewer FFQ block groups experienced declines in their high-quality market share than comparison block groups.

Overall, FFQ block groups tended to add more high-quality capacity than their comparison areas, even after FFQ supported seats are removed. These spillover effects are largest in the early FFQ cohorts that have had the longest treatment period (see Appendix). While none of the cohort-level average differences were statistically significant, the size of the change and the contrast with comparison block groups suggests that FFQ investments may encourage growth in high-quality capacity nearby. These results also provide further evidence that FFQ investments are not crowding out other high-quality providers.



V: Implications for Future Efforts & Funders

The relationship between Fund for Quality interventions and childcare market changes described in this paper suggest that the program's funding and technical assistance model has had positive impacts not only on the providers that receive funding, but on other providers around each grantee. As civic and philanthropic funders and mission-driven investors look for new ways to support the ECE sector, these findings have important implications for replicating and building on models like FFQ:

- Targeted FFQ investments have had a demonstrable impact on access to high-quality care. Areas served by FFQ saw both an increase in the market share of seats in high-quality programs and an increase in the total number of children served in those programs.
- Targeting resources to areas with unmet need is one criterion used by FFQ to make its awards. Adopting this lens may promote provider sustainability. Over the past 10 years, the total supply of childcare rose and then fell in Philadelphia (as did demand for care). During this time the capacity in FFQ areas – places where demand has historically exceeded supply – has grown. Providers in these areas have stayed open and some have expanded during a particularly challenging time for the sector.
- Subsidizing high-quality supply expansion doesn't appear to have unintentional and harmful competitive impacts on un-funded providers. While supply was contracting citywide, supply tended to grow in FFQ areas.



Appendices



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Appendix A: Supplemental Tables & Figures (Section III)

FIGURE A1 shows the change in overall licensed capacity around FFQ grantees. In cohorts 1 – 4, overall capacity increased, but only because of the expansion of FFQ sites, which added an average of 70 to 98 additional seats to offset declines from other providers. In cohort #5 (2023/2024) the increased capacity from FFQ grantees (+43 seats on average) was not enough to offset declines in other nearby providers (-55 seats on average). *Note: figures may not sum due to rounding.*

Figure A1: Change in Average Licensed Capacity Around FFQ Sites, by Cohort and Grantee Type, Start Year to 2024

	Start Year (Varies)			End Year (2024)			Change from Start to End Years			
	FFQ Sites	Avg Capacity (FFQ Only)	Avg Capacity (Net FFQ)	Avg Capacity (All Sites)	Avg Capacity (FFQ Only)	Avg Capacity (Net FFQ)	Avg Capacity (All Sites)	Change in Capacity (FFQ Only)	Change in Capacity (Net FFQ)	Change in Capacity (All Sites)
Cohort 2017/2018 (Starting 2016)	13	88	204	292	158	201	359	+70	-2	+68
Cohort 2019/2020 (Starting 2018)	12	66	225	291	164	217	382	+98	-7	+92
Cohort 2021/2022 (Starting 2020)	9	60	275	336	149	216	366	+89	-59	+30
Cohort 2023/2024 (Starting 2022)	5	14	256	269	107	240	348	+94	-15	+79
Cohort 2023/2024 (Starting 2022)	7	69	436	506	111	381	493	+43	-55	-12

FIGURE A2 shows the change in high-quality capacity around FFQ grantees. In every cohort high-quality capacity increased, both from the expansion of FFQ sites, and from non-FFQ sites located near FFQ grantees. In other words, areas around FFQ grantees have more high-quality capacity both directly from FFQ investments and indirectly, from nearby providers who improved their quality ratings or increased their high-quality capacity.

Note: figures may not sum due to rounding.

Figure A2: Change in Average High-Quality Licensed Capacity Around FFQ Sites, By Cohort and Grantee Type, Start Year to 2024

	Start Year (Varies)			End Year (2024)				Change from Start to End Years		
	FFQ Sites	Avg Capacity (FFQ Only)	Avg Capacity (Net FFQ)	Avg Capacity (All Sites)	Avg Capacity (FFQ Only)	Avg Capacity (Net FFQ)	Avg Capacity (All Sites)	Change in Capacity (FFQ Only)	Change in Capacity (Net FFQ)	Change in Capacity (All Sites)
Cohort 2015/2016 (Starting 2014)	13	12	88	100	105	158	263	+93	+70	+163
Cohort 2017/2018 (Starting 2016)	12	66	66	132	114	164	279	+49	+98	+147
Cohort 2019/2020 (Starting 2018)	9	84	60	144	135	149	284	+52	+89	+141
Cohort 2021/2022 (Starting 2020)	5	61	14	75	93	107	201	+32	+94	+126
Cohort 2023/2024 (Starting 2022)	7	129	69	198	153	91	244	+24	+22	+46

FIGURE A3 shows the high-quality market share of capacity around each FFQ grantee. In each cohort, the percentage point change in high-quality market share met or exceeded the city average over the same period. This effect is consistent whether FFQ sites are included in the calculation or not.

Figure A3: Licensed Capacity in High-Quality Programs Around FFQ Sites, By Cohort and Grantee Type, Start Year to 2024

All Sites Near FFQ Investments (Including FFQ Grantees)								Sites Near FFQ Investments Net of FFQ Grantees							Citywide Change in HQ Share
Start Year (Varies)			End Year (2024)			Change in HQ Share	Start Year (Varies)			End Year (2024)			Change in HQ Share		
	Total HQ Cap	Total Cap	Pct HQ Cap	Total HQ Cap	Total Cap		Pct HQ Cap	Total HQ Cap	Total Cap	Pct HQ Cap	Total HQ Cap	Total Cap		Pct HQ Cap	
Cohort 2015/2016 (Starting 2014)	1,300	3,800	34%	3,424	4,678	73%	+39%	152	2,652	6%	1,366	2,620	52%	+46%	+23%
Cohort 2017/2018 (Starting 2016)	1,580	3,487	45%	3,348	4,585	73%	+28%	787	2,694	29%	1,376	2,613	53%	+23%	+21%
Cohort 2019/2020 (Starting 2018)	1,295	3,021	43%	2,563	3,295	78%	+35%	753	2,479	30%	1,220	1,952	63%	+32%	+18%
Cohort 2021/2022 (Starting 2020)	373	1,346	28%	1,005	1,743	58%	+30%	305	1,278	24%	466	1,204	39%	+15%	+14%
Cohort 2023/2024 (Starting 2022)	1,389	3,539	39%	1,711	3,456	50%	+10%	905	3,055	30%	1,073	2,673	40%	+11%	+9%

Appendix B: Supplemental Tables & Figures (Section IV)

This section includes supplemental tables for section IV, presenting cohort-by-cohort changes in high-quality seats and high-quality market share.

Figure A4: High-Quality Capacity in FFQ v. Comparison Block Groups, by Cohort: Baseline Year

		n	mean	SD	min	25%	50%	75%	max
Cohort 2015/2016 (Starting 2014)	FFQ	11	128	90	0	83	113	197	292
	Comparison FFQ	25	107	110	0	6	61	180	393
Cohort 2017/2018 (Starting 2016)	FFQ	12	102	133	0	0	52	137	371
	Comparison FFQ	32	86	103	0	0	62	129	356
Cohort 2019/2020 (Starting 2018)	FFQ	9	118	167	0	0	99	147	525
	Comparison FFQ	19	105	169	0	0	40	234	635
Cohort 2021/2022 (Starting 2020)	FFQ	5	55	52	0	0	68	98	108
	Comparison FFQ	13	30	43	0	0	6	63	114
Cohort 2023/2024 (Starting 2022)	FFQ	8	91	84	0	19	74	155	232
	Comparison FFQ	21	84	106	0	0	80	133	442
All Cohorts	FFQ	45	104	115	0	0	83	145	525
	Comparison FFQ	110	87	115	0	0	43	133	635

*p<.05; ^p<.10

Figure A5: High-Quality Capacity in FFQ v. Comparison Block Groups, by Cohort: 2024

		n	mean	SD	min	25%	50%	75%	max
Cohort 2015/2016 (Starting 2014) [^]	FFQ	11	308	263	107	146	200	334	839
	Comparison FFQ	25	113	108	0	6	71	194	305
Cohort 2017/2018 (Starting 2016)*	FFQ	12	230	129	108	123	178	341	434
	Comparison FFQ	32	89	109	0	0	44	151	356
Cohort 2019/2020 (Starting 2018)*	FFQ	9	268	149	85	138	291	373	501
	Comparison FFQ	19	115	122	0	0	89	151	420
Cohort 2021/2022 (Starting 2020)*	FFQ	5	149	48	104	111	136	173	221
	Comparison FFQ	13	29	44	0	0	6	63	114
Cohort 2023/2024 (Starting 2022)*	FFQ	8	172	102	20	132	153	205	379
	Comparison FFQ	21	80	108	0	0	45	115	442
All Cohorts*	FFQ	45	237	170	20	136	166	291	839
		110	90	107	0	0	59	146	442

*p<.05; ^p<.10

Figure A6: Change in High-Quality Capacity, by Cohort: Baseline Year to 2024

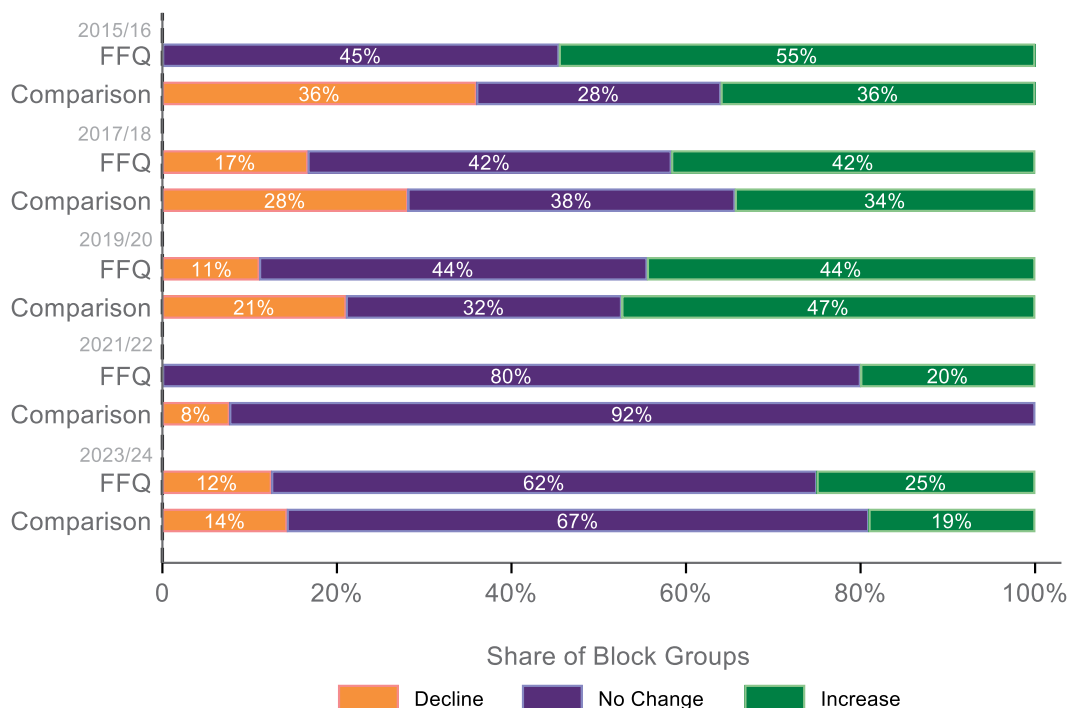
		n	mean	SD	min	25%	50%	75%	max
Cohort 2015/2016 (Starting 2014)	FFQ	11	180	215	-38	18	158	251	612
	Comparison FFQ	25	6	89	-166	-24	0	12	294
Cohort 2017/2018 (Starting 2016)	FFQ	12	128	111	0	61	117	161	425
	Comparison FFQ	32	3	70	-194	-8	0	17	237
Cohort 2019/2020 (Starting 2018)	FFQ	9	150	86	-24	120	161	192	255
	Comparison FFQ	19	10	110	-356	0	0	70	173
Cohort 2021/2022 (Starting 2020)	FFQ	5	94	59	28	43	104	123	173
	Comparison FFQ	13	-1	1	-6	0	0	0	0
Cohort 2023/2024 (Starting 2022)	FFQ	8	81	79	-48	35	74	146	192
	Comparison FFQ	21	-4	30	-127	0	0	0	39
All Cohorts	FFQ	45	133	133	-48	43	120	171	612
	Comparison FFQ	110	3	73	-356	0	0	8	294
*p<.05; ^p<.10									

Figure A7: Change in High-Quality Capacity, by Cohort: Baseline Year to 2024 – Excluding All FFQ Supported Sites

		n	mean	SD	min	25%	50%	75%	max
Cohort 2015/2016 (Starting 2014)	FFQ	11	101	139	0	0	6	162	373
	Comparison FFQ	25	7	89	-166	-24	0	12	294
Cohort 2017/2018 (Starting 2016)	FFQ	12	31	57	-26	0	0	74	170
	Comparison FFQ	32	3	70	-194	-8	0	17	237
Cohort 2019/2020 (Starting 2018)	FFQ	9	22	65	-102	0	0	46	112
	Comparison FFQ	19	10	110	-356	0	0	70	173
Cohort 2021/2022 (Starting 2020)	FFQ	5	20	0	0	0	0	0	99
	Comparison FFQ	13	0	2	-6	0	0	0	0
Cohort 2023/2024 (Starting 2022)	FFQ	8	12	54	-68	0	0	22	122
	Comparison FFQ	21	-4	30	-127	0	0	0	39
All Cohorts	FFQ	45	42	88	-102	0	0	74	373
	Comparison FFQ	110	3	73	-356	0	0	8	294
*p<.05; ^p<.10									

FIGURE A8 presents the share of FFQ and comparison block groups from each cohort that experienced increases, declines, or no change in high-quality supply from the year prior to FFQ investments to 2024. Each cohort is identified by the years when FFQ interventions began. FFQ supported sites are not included in the figure below.

Figure A8: Share of Block Groups Experiencing Increases, Declines, or No Changes in High-Quality Supply between Baseline Year and 2024, by Cohort: Excluding All FFQ Supported Sites



- In all cohorts except 2019/20, a greater share of FFQ block groups than comparison block groups experienced increases in high-quality seats.
- In every cohort, a smaller share of FFQ block groups than comparison block groups experienced declines in high-quality seats.

Due to the small sample sizes across the FFQ block group cohorts none of these differences observed in the figure above are statistically significant. However, the consistency of the pattern across cohorts and the overall relationships observed in the main report suggest that high-quality providers in FFQ block groups that did not receive FFQ investments also tended to have maintained, or increased, their high-quality capacity to a greater degree than providers in similar block groups that did not have any FFQ investments

Figure A9: High-Quality Market Share in FFQ v. Comparison Block Groups, by Cohort: Baseline Year

		n	mean	SD	min	25%	50%	75%	max
Cohort 2015/2016 (Starting 2014)	FFQ	11	59%	34%	0%	40%	70%	81%	100%
	Comparison FFQ	25	62%	42%	0%	10%	80%	100%	100%
Cohort 2017/2018 (Starting 2016)	FFQ	12	44%	42%	0%	0%	35%	89%	100%
	Comparison FFQ	32	44%	41%	0%	0%	43%	85%	100%
Cohort 2019/2020 (Starting 2018)	FFQ	9	23%	27%	0%	0%	25%	32%	84%
	Comparison FFQ	19	25%	34%	0%	0%	11%	43%	100%
Cohort 2021/2022 (Starting 2020)	FFQ	5	50%	48%	0%	0%	58%	92%	100%
	Comparison FFQ	13	53%	48%	0%	0%	65%	100%	100%
Cohort 2023/2024 (Starting 2022)	FFQ	8	58%	43%	0%	19%	66%	98%	100%
	Comparison FFQ	21	57%	42%	0%	0%	70%	96%	100%
All Cohorts	FFQ	45	47%	39%	0%	0%	40%	84%	100%
	Comparison FFQ	110	48%	42%	0%	0%	55%	93%	100%
*p<.05; ^p<.10									

Figure A10: High-Quality Market Share in FFQ v. Comparison Block Groups, by Cohort: 2024ported Sites

		n	mean	SD	min	25%	50%	75%	max
Cohort 2015/2016 (Starting 2014)	FFQ	11	84%	17%	50%	72%	90%	100%	100%
	Comparison FFQ	25	63%	42%	0%	37%	86%	100%	100%
Cohort 2017/2018 (Starting 2016)	FFQ	12	83%	23%	35%	69%	95%	100%	100%
	Comparison FFQ	32	44%	41%	0%	0%	43%	82%	100%
Cohort 2019/2020 (Starting 2018)	FFQ	9	83%	17%	52%	78%	87%	96%	100%
	Comparison FFQ	19	48%	41%	0%	0%	38%	98%	100%
Cohort 2021/2022 (Starting 2020)	FFQ	5	88%	13%	69%	81%	90%	100%	100%
	Comparison FFQ	13	46%	47%	0%	0%	47%	100%	100%
Cohort 2023/2024 (Starting 2022)	FFQ	8	77%	19%	51%	61%	73%	97%	100%
	Comparison FFQ	21	54%	46%	0%	0%	76%	96%	100%
All Cohorts	FFQ	45	82%	18%	35%	69%	90%	100%	100%
	Comparison FFQ	110	51%	43%	0%	0%	60%	100%	100%
*p<.05; ^p<.10									

Figure A11: Percentage Point Change in Share of High-quality Capacity, by Cohort: Baseline Year to 2024

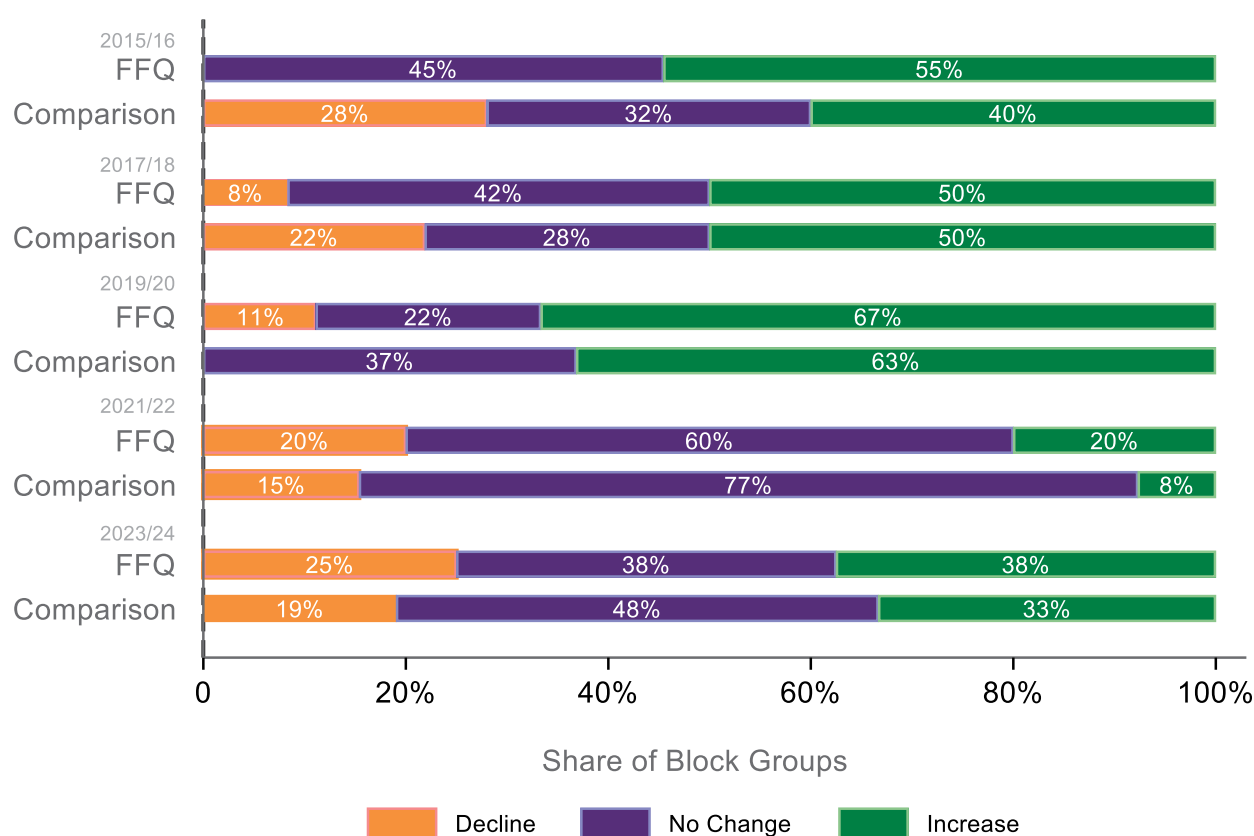
		n	mean	SD	min	25%	50%	75%	max
Cohort 2015/2016 (Starting 2014)	FFQ	11	25%	42%	-46%	0%	17%	51%	100%
	Comparison FFQ	25	1%	40%	-100%	-2%	0%	14%	100%
Cohort 2017/2018 (Starting 2016)	FFQ	12	39%	41%	-9%	4%	24%	76%	100%
	Comparison FFQ	32	0%	46%	-100%	0%	0%	16%	100%
Cohort 2019/2020 (Starting 2018)	FFQ	9	60%	33%	-6%	52%	68%	81%	100%
	Comparison FFQ	19	23%	30%	0%	0%	9%	35%	100%
Cohort 2021/2022 (Starting 2020)	FFQ	5	38%	49%	-2%	0%	11%	81%	100%
	Comparison FFQ	13	-7%	29%	-100%	0%	0%	0%	25%
Cohort 2023/2024 (Starting 2022)	FFQ	8	19%	25%	-4%	-2%	8%	40%	59%
	Comparison FFQ	21	-3%	27%	-100%	0%	0%	12%	23%
All Cohorts	FFQ	45	36%	39%	-46%	0%	25%	68%	100%
	Comparison FFQ	110	3%	38%	-100%	0%	0%	16%	100%
*p<.05; ^p<.10									

Figure A12: Change in Share of High-quality Capacity, by Cohort: Baseline to 2024 – Excluding FFQ Supported Sites

		n	mean	SD	min	25%	50%	75%	max
Cohort 2015/2016 (Starting 2014)	FFQ	21%	26%	0%	0%	14%	25%	75%	100%
	Comparison FFQ	2%	40%	-100%	-2%	0%	14%	100%	100%
Cohort 2017/2018 (Starting 2016)	FFQ	25%	39%	-8%	0%	1%	38%	100%	100%
	Comparison FFQ	0%	46%	-100%	0%	0%	16%	100%	100%
Cohort 2019/2020 (Starting 2018)	FFQ	31%	41%	-28%	0%	22%	61%	100%	100%
	Comparison FFQ	22%	30%	0%	0%	10%	35%	100%	100%
Cohort 2021/2022 (Starting 2020)	FFQ	8%	22%	-9%	0%	0%	0%	46%	100%
	Comparison FFQ	-7%	29%	-100%	0%	0%	0%	25%	100%
Cohort 2023/2024 (Starting 2022)	FFQ	-3%	44%	-100%	-4%	0%	22%	43%	100%
	Comparison FFQ	-3%	27%	-100%	0%	0%	12%	23%	100%
All Cohorts	FFQ	18%	37%	-100%	0%	1%	39%	100%	100%
	Comparison FFQ	3%	38%	-100%	0%	0%	16%	100%	100%
*p<.05; ^p<.10									

FIGURE A13 presents the share of FFQ and comparison block groups from each cohort that experienced increases, declines, or no change in high-quality market share from the year prior to FFQ investments to 2024. Each cohort is identified by the years when FFQ interventions began. FFQ supported sites are not included in the figure below.

Figure A13: Share of Block Groups Experiencing Increases, Declines, or No Changes in High-Quality Market Share, by Cohort : Excluding FFQ Supported Sites



- In every cohort, the share of FFQ block groups that experienced increases in high-quality market share was greater than, or equal to, the share of comparison block groups that experienced increases.



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