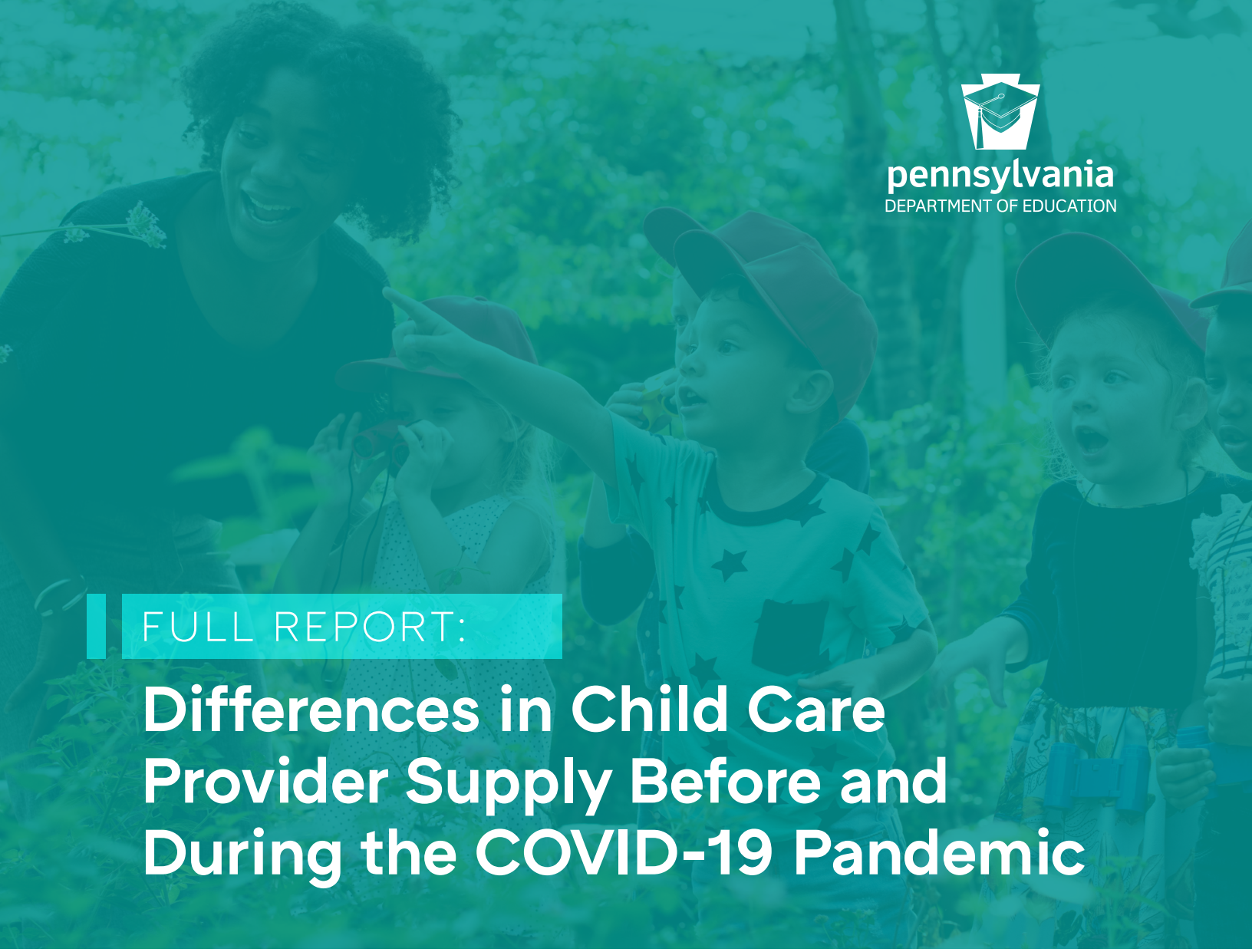

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FULL REPORT:

Differences in Child Care Provider Supply Before and During the COVID-19 Pandemic

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Pennsylvania State University

RECIPIENT OF THE
Education Research and Evaluation Scholar Award
from the Pennsylvania Department of Education (PDE)

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Research and Evaluation

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Abstract

Access to child care providers is a critical factor for family wellbeing. Safe, reliable, and high-quality child care supports children's healthy development, parents' workforce participation, and community and state economic development. However, the COVID-19 pandemic had a severe impact on child care providers and their ability to sustain operation. This study explores variation in the supply of child care providers in Pennsylvania before and during the COVID-19 pandemic. We measure provider supply in three ways: new supply (as measured by new certificates of compliance); existing supply (as measured by certificate renewals); and lost supply (as measured by permanent provider closures). At the state level, new and existing child care supply declined substantially during Mar–Aug 2020, but largely rebounded in Sept 2020–Feb 2021. However, the magnitude of changes varied by community characteristics. In most cases, cities, rural communities, high-poverty communities, and communities of color experienced greater relative decreases in new and existing child care supply during the early months of the pandemic, as well as smaller increases (or even continued decreases) in child care supply in Sept 2020–Feb 2021. Notable differences in new and existing child care supply were evident even before the onset of the pandemic, with suburban communities, low-poverty communities, and predominantly White communities having much higher counts than cities, high-poverty communities, and communities of color. Contrary to our hypothesis, we did not observe substantial increases in the share of providers that closed permanently during pandemic time periods. This finding suggests that state and federal policies designed to support child care providers during this time of crisis were effective in doing so. Nonetheless, relative losses in child care supply were greatest in cities, rural communities, high-poverty communities, and communities of color. Collectively, our findings point to a need to target resources to the communities most affected by reductions in child care supply in order to equalize child care access across the commonwealth.

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Executive Summary

Access to child care providers is a critical factor for family wellbeing. Safe, reliable, and high-quality child care supports children's healthy development, parents' workforce participation, and community and state economic development. The COVID-19 pandemic had a severe impact on child care providers and their ability to sustain operation. Even with swift policy responses from state and federal governments, many communities experienced declines in their supply of child care providers.

This study explores variation in the supply of child care providers in Pennsylvania before and during the COVID-19 pandemic. We measure provider supply in three ways: new supply (as measured by new certificates of compliance); existing supply (as measured by certificate renewals); and lost supply (as measured by permanent provider closures). We examined changes in the raw number of certificates and closures, and also estimated changes in providers' capacity for each supply measure. We compared changes by providers' geographic locale, community poverty level, and community racial composition, as well as by provider type (i.e., child care centers vs. child care homes[1]) and quality rating (i.e., STAR).

KEY FINDINGS FOR NEW PROVIDER SUPPLY:

- At the state level, new certificate and new capacity counts dropped substantially during the early months of the pandemic. New capacity counts rebounded in Sept 2020-Feb 2021, though new certificate counts remained relatively low.
- The magnitude of changes in new provider supply varied substantially by community characteristics. Cities, high-poverty communities, and communities of color experienced greater relative declines in both new certificate counts and new capacity during pandemic time periods, compared to rural and suburban communities, low-poverty communities, and predominantly White communities.
- While new provider supply rebounded in many communities in Sept 2020-Feb 2021, new certificate and capacity counts remained relatively low in high-poverty communities and communities of color.

KEY FINDINGS FOR EXISTING PROVIDER SUPPLY:

- Certificate renewal counts and existing capacity counts declined in Mar-Aug 2020, but rebounded in Sept 2020-Feb 2021 to levels that were similar to — or even greater than — pre-pandemic time periods. However, like with new provider supply, the magnitude of these changes varied by community characteristics.
- From Mar-Aug 2019 to Mar-Aug 2020, relative declines in existing provider supply were greatest in cities and communities of color, and smallest in rural communities and predominantly White communities. These trends generally persisted regardless of provider type and STAR rating.
- In Sept 2020-Feb 2021, increases in renewal counts and existing capacity estimates were higher among providers in suburban and low-poverty communities, while declines persisted in communities of color.
- Like with new provider supply, notable differences in existing provider supply were present even before the pandemic. Suburban communities, low-poverty communities, and predominantly White communities had much higher existing capacity counts than cities, high-poverty communities, and communities of color.

1 Due to small sample sizes, we combined family child care homes and group child care homes into a single child care homes category.

- In nearly all communities, child care homes experienced greater relative declines in existing capacity in Mar-Aug 2020, as well as less growth – or even continued decline – in Sept 2020-Feb 2021, compared to child care centers. This finding may be part of a broader trend of decline among child care homes that began long before the onset of the pandemic.

KEY FINDINGS FOR LOST PROVIDER SUPPLY:

- During the pandemic time periods examined, relative losses in provider supply as a result of permanent closure were greater in cities, rural communities, high-poverty communities, and communities of color. STAR 1/2 providers and child care homes also experienced a significantly greater prevalence of permanent closure compared to STAR 3/4 providers and child care centers, a trend that persisted across community contexts.
- The same communities that experienced greater relative losses in child care supply during the pandemic also had higher rates of permanent provider closure prior to the pandemic.
- Contrary to our expectations, we did not observe substantial increases in the share of providers that closed permanently during the first year of the pandemic. This finding suggests that state and federal policies designed to support child care providers during this time of crisis were effective in doing so.

Put together, our findings show cities, rural communities, high-poverty communities, and communities of color in Pennsylvania experienced greater relative declines in child care supply during the pandemic. In many cases, gaps in child care supply were stark even before the pandemic. More resources should be targeted to these communities in order to equalize child care access across the commonwealth.

Background

Access to child care providers is a critical factor for family wellbeing. Safe, reliable, and high-quality child care supports children's healthy development, parents' workforce participation, and community and state economic development.[2] However, access to child care providers at the community level is unequal. Research suggests rural communities and those with higher shares of residents of color are more likely to have a limited supply of child care providers, while wealthier and suburban communities are the least likely to experience child care shortages.[3] The COVID-19 pandemic may have exacerbated these inequalities, or created new ones. Lost revenue from reduced enrollment, forced closure, and higher expenditures resulting from new health and safety requirements — on top of the stress of caring for young children during such a crisis — has made it difficult for ECE providers in many communities to sustain business.[4] Research in other states suggests communities in metropolitan areas[5] and those with high shares of immigrant families, Hispanic families, and dual-language speakers[6] have experienced greater declines in child care supply during the pandemic. Quantitative and qualitative evidence from Pennsylvania has likewise documented the challenges child care providers have experienced, leading to reductions in provider supply in some communities, such as Philadelphia.[7] However, exactly where and to what degree differences in child care supply have persisted in Pennsylvania during the pandemic remains unclear. Such information is essential for understanding the pandemic's effects on family wellbeing and for determining appropriate policy responses to reduce inequalities.

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2 Kimmel, J. (2006). Child care, female employment, and economic growth. *Community Development, 37*(2), 71-85; Morrissey, T. W. (2017). Child care and parent labor force participation: a review of the research literature. *Review of Economics of the Household, 15*(1), 1-24; National Institute of Child Health and Human Development Early Child Care Research Network, & Duncan, G. J. (2003). Modeling the impacts of child care quality on children's preschool cognitive development. *Child Development, 74*(5), 1454-1475; United States Chamber of Commerce Foundation. (2022). *Untapped potential: How childcare impacts Utah's workforce productivity and the state economy.*

3 Malik, R., Hamm, K., Schochet, L., Novoa, C., Workman, S., & Jessen-Howard S. (2018). *America's child care deserts in 2018.* Center for American Progress.

4 National Association for the Education of Young Children. (2020). Am I next? Sacrificing to stay open, child care providers face a bleak future without relief.

5 Delap, S., Franko, M., Nicolaou, K., Silva-Padrón, G., & Thornton, C. (2021). *Measuring the impact of COVID-19 on Colorado's early care and learning sector.* Early Milestones Colorado.

6 Quick, H., White, L., Brodziak de los Reyes, I., Bergey, R., & Carbuccia-Abbott, M. (2020). *A system in jeopardy: California's early learning system and its dual language learners during the COVID-19 pandemic.* American Institutes of Research; Zhang, Q., Sauval, M., & Jenkins, J. M. (2023). Impacts of the COVID-19 pandemic on the child care sector: Evidence from North Carolina. *Early childhood research quarterly, 62*, 17-30.

7 Schimke, A. (2022, July 15). *Mrs. Dee opened a Philly child care center mid-pandemic. It's been hard.* Chalkbeat Philadelphia; Sirinides, P. (2020). *The impact of COVID-19 on Pennsylvania child care.* Institute of State and Regional Affairs at Penn State-Harrisburg.

Study Purpose

This study explores variation in the supply of child care providers in Pennsylvania before and during the COVID-19 pandemic. We measure provider supply in three ways:

- **new supply,** as measured by new certificates of compliance;
- **existing supply,** as measured by certificate renewals; and,
- **lost supply,** as measured by permanent provider closures.

We analyzed changes in new, existing, and lost supply in two ways. First, we examined changes in the raw number of certificates and closures. Second, we estimated changes in provider capacity — i.e., the maximum number of children providers are able to enroll — for each supply measure.[8] Put together, these two methods helped us understand how changes in child care supply at the provider level affected enrollment opportunities at the child level.

We explored changes in provider supply by provider type (i.e., child care centers and child care homes[9]) and Keystone STAR level.[10] We also examined variation in child care supply by providers' community characteristics, including geographic locale, community poverty, and community racial composition.

Pennsylvania's Response to the Pandemic

The COVID-19 pandemic hit Pennsylvania in March 2020. To reduce the risk of viral transmission, schools were required to close on March 13, and all non-life-sustaining businesses were ordered to close on March 19. County-level stay-at-home orders began on March 23, and by April 1 all 67 counties in the state were under such orders. The state adopted a phased reopening approach, where counties transitioned through three phases – red, yellow, and green – based on infection counts and the presence of key safety mitigation tools, such as testing and contact tracing. Child care facilities were permitted to reopen when counties moved from "red" to "yellow". Child care providers serving the families of essential workers were able to obtain waivers to maintain operation even during the "red" phase. A group of 24 counties, including many central and northwestern counties, such as Centre and Erie, were the first to enter the "yellow" phase on May 8. The state's second-most populous county, Allegheny, along with 12 other counties, transitioned to "yellow" on May 15. Some counties, including the populous urban and suburban counties of Bucks, Lancaster, Montgomery, and Philadelphia, were not able to transition to "yellow" until June 5.

State agencies in Pennsylvania responded swiftly during the early weeks and months of the pandemic to support child care providers. For example, providers that served families with child care subsidies continued to receive subsidy reimbursement payments during closures. Following reopening, the state continued to make subsidy payments based on pre-pandemic enrollment counts, and not actual attendance, through September 2020. Pennsylvania's Department of Human Services also temporarily

8 Capacity counts vary widely across providers. Child care homes serve 6-12 children, while some larger child care centers can enroll hundreds of children. The average capacity for a child care center in our sample is around 90.

9 Due to small sample sizes, we combined family child care homes and group child care homes into a single child care homes category.

10 Keystone STARS is Pennsylvania's quality rating and improvement system. For more information, see https://www.pakeys.org/keystone-stars/.

suspended, in part or in full, certain regulatory requirements for certified child care facilities that were challenging to fulfill without consistent attendance and/or in the absence of supporting entities (e.g., medical professionals, training institutions).[11] Such policies were critical to ensuring the viability of Pennsylvania's child care sector, and as reported in a research study by the Institute of State and Regional Affairs at Penn State-Harrisburg,[12] were the lifeline that saved many providers from having to close permanently. As regulatory provisions under the state disaster emergency declaration were phased out in the fall of 2020, Pennsylvania's Office of Child Development and Early Learning continued to support providers coping with financial losses related to the pandemic through various initiatives and grant opportunities supported with available federal funding (e.g., ARPA, CARES, and CRRSA).

The pandemic affected some child care providers' abilities to maintain an active certificate of compliance. (Child care providers must hold a valid certificate of compliance to operate in Pennsylvania.) Some providers' certificates of compliance expired during periods of closure. State agencies issued guidance to providers to support them in renewing their certificates, with steps that included notifying regional offices, signing a reopening attestation statement, submitting a renewal application, and allowing a certification representative to conduct a renewal inspection.[13] The Pennsylvania Department of Human Services also issued guidance on alternative techniques for conducting site inspections to measure regulatory compliance, such as remote material review and remote physical site inspection via Skype.[14] Additionally, state agencies issued guidelines to providers with active certificates of compliance to support the reopening of their facilities. Annual inspections of child care facilities for certificate renewals were temporarily suspended during stay-at-home orders, and resumed on June 22, 2020.[15]

Data, Methods, and Limitations

Our provider-level data come from Pennsylvania's Office of Child Development and Early Learning. Our sample includes licensed child care providers that served children ages 0-5; providers that were unlicensed or that served only school-age children were excluded. Our analysis includes data from 2018-2021, permitting us to explore child care supply patterns at different points in time before and during the pandemic. We organized our data by the following six-month time periods: September 2018-February 2019; March-August 2019; September 2019-February 2020; March-August 2020; and September 2020-February 2021. The first three time periods are pre-pandemic, and the latter two cover the first year of the pandemic.

Due to natural seasonal fluctuations that may affect child care supply, we compare same-month time periods from before and during the pandemic, and organize our findings around these time periods (i.e.., March-August and September-February). One limitation of this study is that we lack March-August

11 Announcement C-20-04: Suspension of Regulatory Requirements for Certified Child Care Facilities During the COVID-19 Pandemic. Pennsylvania Department of Human Services. https://www.dhs.pa.gov/coronavirus/Pages/OCDEL-Suspension-of-Regulatory-Regulations-for-Child-Care-Facilities.aspx

12 Sirinides, P. (2020). *The Impact of COVID-19 on Pennsylvania Child Care.* Institute of State and Regional Affairs.

13 Pennsylvania Office of Child Development and Early Learning. Announcement C-20-13: Reopening of Certified Child Care Facilities Temporarily or Permanently Closed Due to COVID-19.

14 Pennsylvania Department of Human Services. Alternative techniques for measuring regulatory compliance in response to COVID-19, March 16, 2020.

15 Pennsylvania Office of Child Development and Early Learning. Renewal inspections for child care facilities to begin June 22, 2020. https://www.pakeys.org/getting-started/about-us/newsletter-signup/certification-services-enews/

2018 data; having a second example of pre-pandemic spring/summer provider supply trends would have helped us establish a clearer baseline for this time period. At the same time, while having data from both September 2018-February 2019 and September 2019-February 2020 helps us understand pre-pandemic fall and winter child care supply trends, these cross-sections may not necessarily represent the supply trends that occurred in earlier years.

For our analysis by provider characteristics, we compare differences by provider type and provider STAR rating. Due to small sample sizes, we combined group child care homes and family child care homes into a single child care homes category. This consolidation may obscure variation in the unique experiences of group and family child care homes. In some cases, the listed licensed capacity of child care homes was greater than 12 (twelve is the maximum enrollment permitted for group child care homes). In these cases, we replaced the given capacity with the number 12. A small number of operating providers were listed as having "No STAR".[16] Per guidance from OCDEL, we included "No STAR" providers in the STAR 1 category.

For our analysis by community characteristics, we defined "community" as the zip code where provider facilities were located. We used National Center for Education Statistics locale classifications to assign geographic locale categories (i.e., city, suburban, rural). We measured community poverty by the percentage of residents within the community with incomes below 200% of the federal poverty level, based on data from the 2019 American Community Survey (ACS) 5-year estimates.[17] We measured community racial composition by the percentage of residents within the community who were White, again using ACS data.[18] For a small number of cases, providers' facility zip codes did not link to NCES or ACS data; these cases were included in aggregate counts, but were excluded from community-level analyses. For our community poverty and community racial composition measures, we primarily compare communities in the top and bottom quartiles; provider supply counts for communities in the middle quartiles are included in the appendix.

We examine differences in child care supply by communities' urbanicity, poverty level, and racial composition. In Pennsylvania, these community-level demographic characteristics often overlap. For example, cities are more likely to have concentrated populations of families of color, and in many parts of the state, poverty is also concentrated in communities of color.

Licensed capacity is defined as the maximum number of children permitted to receive care in a child care facility at one time, based on the square footage of the child care space and the age of the children served. Providers' licensed capacities do not necessarily match the actual number of children they choose to enroll. Accordingly, we consider our capacity counts to be estimates of the potential number of children providers could enroll, if they operated at maximum licensed capacity.

Some providers applied for new certificates of compliance but did not receive them. Approximately 20% of new certificate applications, along with 1% of applications for certificate renewal, did not result in the receipt of a certificate of compliance. We excluded these applicants from our provider supply counts, since these providers should not have served children without certification. The proportion of applications that were not granted a certificate rose during the March-August 2020 time period, an increase which may in part be attributable to stay-at-home orders and other temporary safety measures that would have made it more difficult for providers to complete certain requirements related to certification. Among

16 Because the majority of new providers had not yet obtained a STAR rating, our analyses by STAR rating only include existing and closed providers. Analyses are based on the provider's rating at the time of their recertification or closure.

17 Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4%+.

18 Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

providers that applied for a certificate renewal, those who did not receive one were overwhelmingly providers with a STAR 1 quality rating or that did not participate in the state's quality rating system. Additional analysis of rates of application submission and resulting certification outcomes is provided in Tables A-13a-d in the appendix.

This study is descriptive. Descriptive analyses are important for several aims; they help to provide "basic understanding of a phenomenon" while "identifying hidden patterns in large datasets".[19] However, descriptive analysis cannot explain why the numbers are the way they are. While we document changes in counts and trends during the pandemic, our study design does not make it possible to isolate the unique effect of the pandemic on these changes. That is, while the pandemic was a seismic event that undoubtedly influenced child care supply in Pennsylvania, other confounding factors may have too.[20]

Findings for New Provider Supply

We measure new provider supply in terms of the number of new certificates of compliance approved by Pennsylvania's Office of Child Development and Early Learning (OCDEL). To receive a new certificate of compliance, providers must submit an application that includes information related to finances, ownership, staff (e.g., criminal history), and the facility. Prior to applying for a new certificate of compliance, providers must obtain a certificate of occupancy for their facility from their local municipality, and complete an orientation program through their regional OCDEL certification office.[21]

In our analysis of new provider supply, we discuss trends in the number of applications submitted for new certificates of compliance as well as the estimated capacity that would result from these new providers being in operation.[22] We describe changes in the raw number of approved certificates, as well as relative changes (i.e., percent changes) in these numbers over time (e.g., capacity declined by 18.0% from March-August 2019 to March-August 2020). We primarily discuss relative changes in the context of capacity; new certificate counts, especially when disaggregated by subgroup, were smaller and less suited to a relative change measure.[23] To simplify our explanations of the data, we often refer to September-February time periods as fall/winter, and March-August time periods as spring/summer. We examine differences by provider type (i.e., centers vs. homes) and community characteristics. Because most new providers in our sample had not yet obtained a quality rating, we do not include analysis by STAR level.

Factors associated with the pandemic may have influenced new providers' ability to apply for and/or obtain new certificates of compliance. Economic and social instability, lack of certainty around when

19 Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., & Reber, S. (2017). *Descriptive analysis in education: A guide for researchers.* (NCEE 2017-4023). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.

20 Some recent studies have leveraged advanced statistical techniques to estimate the unique influence of the pandemic on child care enrollment. For example, Zhang, Sauval, and Jenkins (2023) employed a quasi-experimental difference-in-difference design using panel data from the state of North Carolina to isolate the effects of the pandemic from unobservable seasonal trends in child care enrollments and closures, finding the pandemic reduced county-level enrollments by 40% through December 2020.

21 Pennsylvania Office of Child Development and Early Learning. (nd). *Opening a Pennsylvania child care facility.*

22 Licensed capacity is defined as the maximum number of children permitted to receive care in a child care facility at one time, based on the square footage of the child care space and the age of the children served. Providers' licensed capacities do not necessarily match the actual number of children they choose to enroll. Accordingly, we consider our capacity counts to be estimates of the potential number of children providers could enroll, if they operated at maximum licensed capacity.

23 Because these groups were smaller in size, a percentage change would appear large even when it represents only a small change in provider counts. In such cases, we describe the changes in raw numbers across time periods.

safety mitigation measures would be lifted, and health concerns, among other potential factors, may have discouraged new providers from opening child care facilities. Additionally, on March 16, 2020, the Department of Human Services recommended the temporary suspension of initial site inspections, a requirement to obtain a new operating license.[24] This policy may have delayed some providers in obtaining new certificates.

An analysis of trends in new provider supply is necessary for understanding the broader picture of child care supply in Pennsylvania. To best understand this broader picture, findings in this section should be considered alongside findings for existing provider supply and lost provider supply, which are described in subsequent sections.

State-level Trends in New Provider Supply

New Certificates of Compliance

Overview. At the state level, new certificate counts declined during both pandemic time periods. During all time periods examined, child care centers were a greater share of new certificates than child care homes. Our data suggest the supply of new child care homes in Pennsylvania is declining.[25] For example, in Sept 2018-Feb 2019, child care homes were 41.6% of all new certificates (i.e., 122 of 293). But in subsequent fall/winter time periods, that share was closer to one in three new certificates.

Spring/Summer Trends. The total number of new certificates dropped from 359 in Mar-Aug 2019 to 213 in Mar-Aug 2020, a decrease of 40.7% (Figure 1a and Table A-1). Among child care homes, new certificate counts dropped by half, from 125 to 63. New certificate counts also declined substantially among child care centers, from 234 to 150.

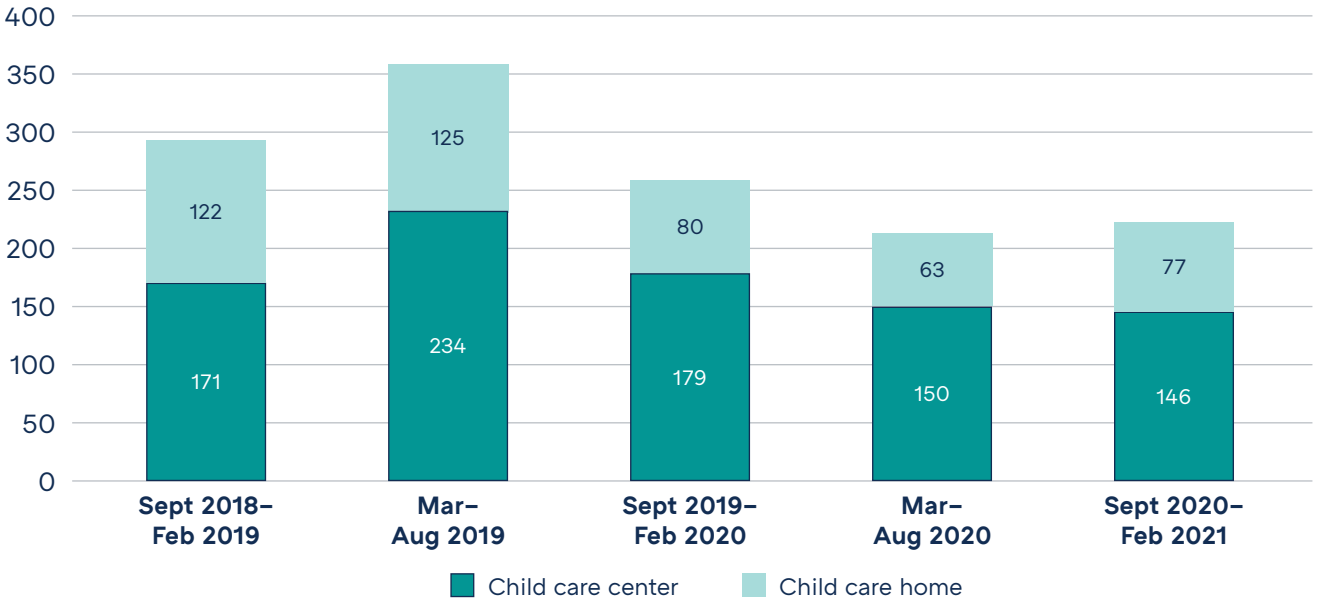
Fall/Winter Trends. In Sept 2020-Feb 2021, 223 new certificates were approved. This total was lower than in Sept 2018-Feb 2019 (n=293) and Sept 2019-Feb 2020 (n=259). Among child care centers, 146 new certificates were approved in Sept 2020-Feb 2021, down from the pre-pandemic fall/winter counts of 171 and 179. For child care homes, the new certificate count in Sept 2020-Feb 2021 (n=77) was slightly lower than in Sept 2019-Feb 2020 (n=80), but much lower compared to Sept 2018-Feb 2019 (n=122).

Our data suggest the supply of new child care homes in Pennsylvania may be declining.

24 Pennsylvania Department of Human Services. Alternative techniques for measuring regulatory compliance in response to COVID-19, March 16, 2020.

25 Recent studies have documented a persistent decline in the number of licensed child care homes operating in the United States. For example, evidence from the national Child Care Licensing Study suggests that the supply of licensed child care homes dropped by nearly half from 2005 to 2017 (see: National Center on Early Childhood Quality Assurance. (2020). *Addressing the decline in family child care.* Administration for Children and Families, Office of Child Care). It is possible that the decline in new certificate counts for child care homes observed in 2020 and 2021 in Pennsylvania reflects this downward trend (e.g., even prior to the pandemic, the number of new certificates for child care homes in Sept 2019-Feb 2020 [80] was lower than in Sept 2018-Feb 2019 [122].)

FIGURE 1a. New certificates of compliance, by provider type, September 2018–February 2021



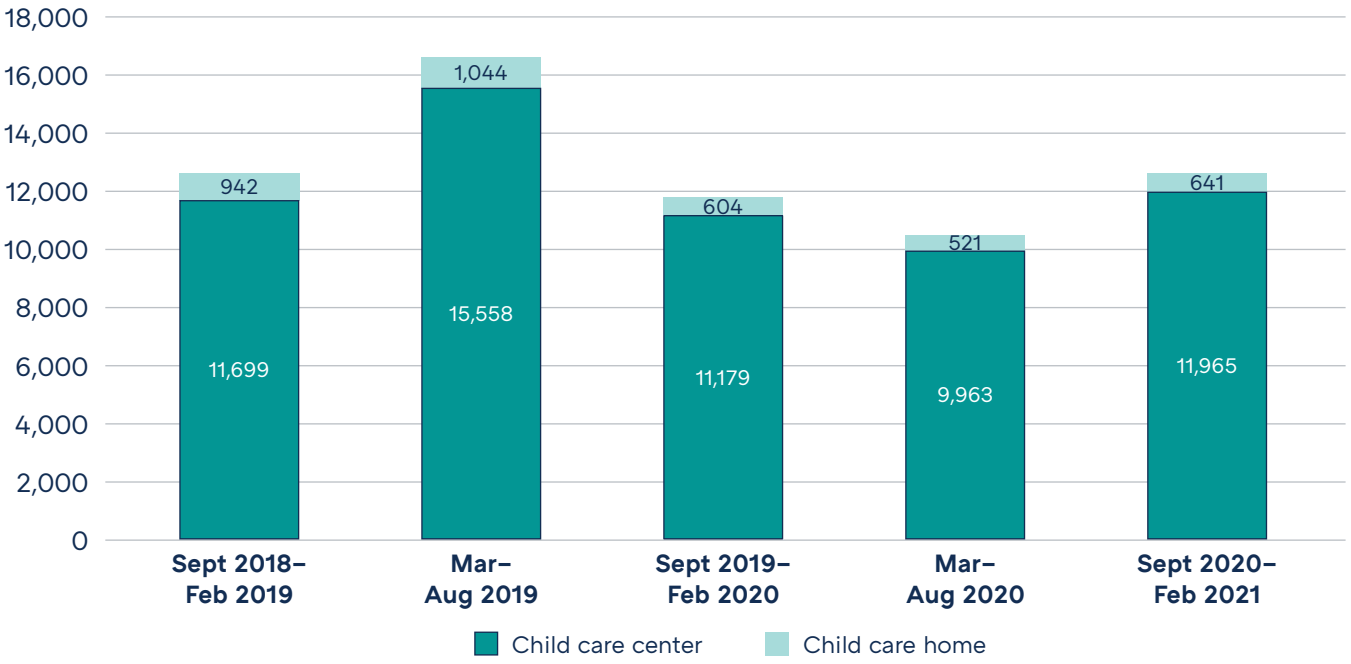
New Capacity

Overview. The estimated capacity of new providers dropped substantially in Mar-Aug 2020, but appeared to rebound in Sept 2020-Feb 2021. Across time periods, child care centers housed the vast majority of new capacity. Child care homes' share of new capacity was fairly consistent across time periods (e.g., 6.3% in Mar-Aug 2019 and 5.0% in Mar-Aug 2020).

Spring/Summer Trends. In Mar-Aug 2020, new provider capacity was 10,484, a 36.9% decline from Mar-Aug 2019, when new capacity was 16,602 (Figure 1b and Table A-1). From Mar-Aug 2019 to Mar-Aug 2020, new child care center capacity decreased from 15,558 to 9,963 (-36.0%). New child care home capacity dropped at a greater rate of 50.1%, from 1,044 to 521.

Fall/Winter Trends. In contrast to the spring/summer time periods, new capacity counts were similar when comparing fall/winter time periods, even during the pandemic. In Sept 2020-Feb 2021, new provider capacity was 12,606, a count nearly identical to Sept 2018-Feb 2019 (n=12,641) and slightly higher than Sept 2019-Feb 2020 (n=11,783). The finding that the Sept 2020-Feb 2021 new capacity count was comparable to previous fall/winter time periods, despite a relatively low new certificate count at that time, may suggest that new child care providers entering the market at that time were larger and able to offer more enrollment slots. Among child care centers, the Sept 2020-Feb 2021 capacity of 11,965 was greater than both pre-pandemic fall/winter time periods. Among child care homes, new capacity in Sept. 2020-Feb 2021 (n=641) was greater than in Sept 2019-Feb 2020 (n=604) but far lower than in Sept 2018-Feb 2019.

FIGURE 1b. Estimated capacity of new certificates, by provider type, September 2018–February 2021



Trends in New Provider Supply by Geographic Locale

New Certificates of Compliance

Overview. Changes in new provider supply varied by geographic locale, with cities experiencing the greatest relative losses in new provider supply during the pandemic. Indeed, prior to the pandemic, cities had the highest new provider certificate counts of any locale, but during pandemic time periods, urban counts were the lowest. Child care homes made up a larger share of new certificates in cities, compared to their shares in suburban and rural communities. For example, in Sept 2020-Feb 2021, 57.5% of new certificates in cities were for child care homes, compared to 63.2% in suburban communities and 75.7% in rural communities.

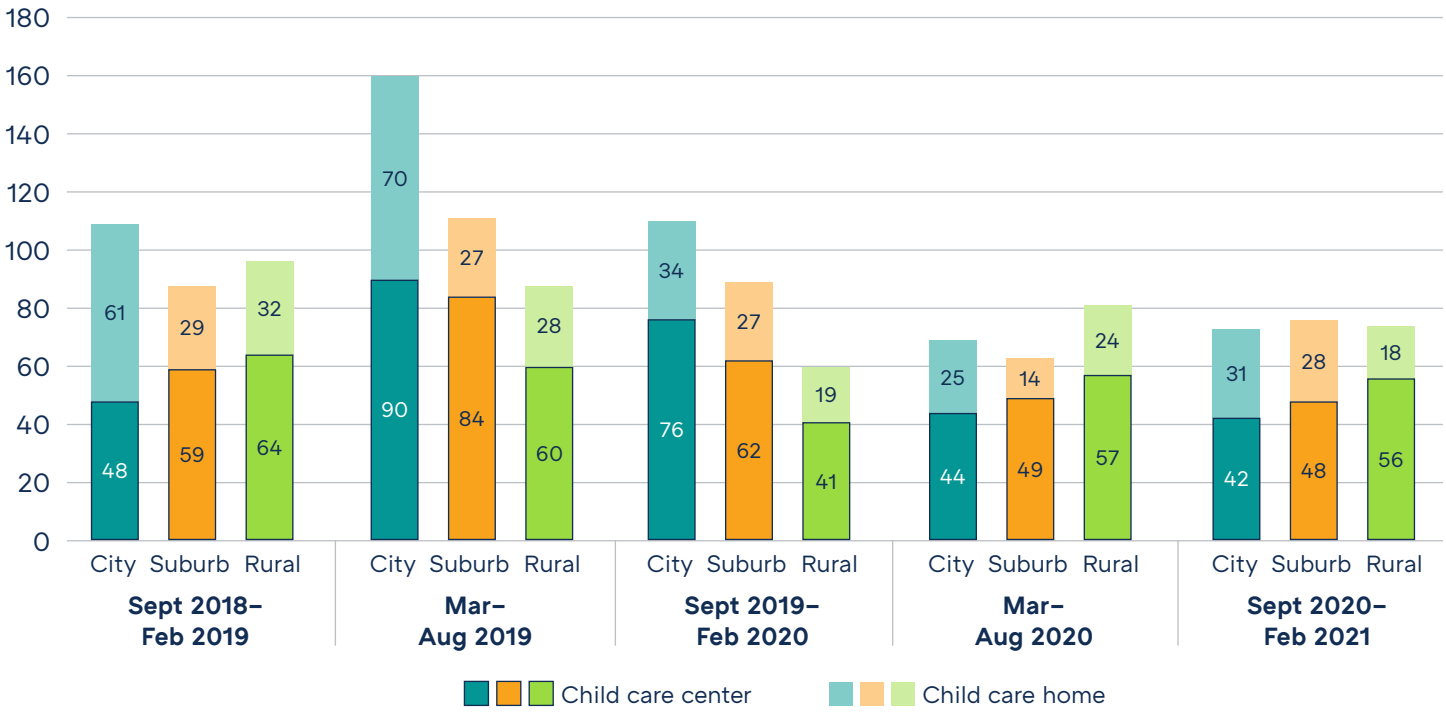
Changes in new provider supply varied by geographic locale, with cities experiencing the greatest relative losses in new provider supply during the pandemic.

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, new certificate counts declined by over half in cities, from 160 to 69 (Figure 2a and Table A-2a). New certificate counts also dropped substantially in the suburbs, from 111 to 63. Rural communities experienced the smallest decline in the number of new certificates, from 88 to 81. The same pattern persisted when looking at child care centers and child care homes, with urban providers of both types experiencing greater declines across spring/summer time periods, particularly compared to rural providers. In cities, new child care center certificate counts dropped from 90 to 44, while new child care home certificate counts dropped even more precipitously, from 70 to 25. In suburban areas, new certificate counts decreased from 84 to 49 for child care centers, and from 27 to 14 for child care homes. In rural areas, declines were modest, where new certificate counts for centers

and homes fell by 3 and 4 providers, respectively (i.e., 60 to 57, and 28 to 24).

Fall/Winter Trends. In Sept 2020-Feb 2021, 73 new certificates were approved in urban communities, a substantial decline from the two pre-pandemic fall/winter counts of 109 and 110. In the suburbs, 76 new certificates were approved in Sept 2020-Feb 2021, down from the previous pre-pandemic time periods when counts were just under 90. In contrast, in rural communities, the new certificate count in Sept 2020-Feb 2021 (n=74) was lower than in Sept 2018-Feb 2019 (n=96) but higher than in fall/winter 2019-20 (n=60). In urban and suburban areas, new certificate counts for child care centers were lower in Sept 2020-Feb 2021 than in the two prior fall/winter time periods, while in rural communities the new child care center certificate count was actually higher in Sept 2020-Feb 2021 than in Sept 2019-Feb 2020. In urban and rural areas, new child care home certificate counts were similar between Sept 2020-Feb 2021 and Sept 2019-Feb 2020, but notably lower when compared to Sept 2018-Feb 2019.

FIGURE 2a. New certificates of compliance, by provider type and geographic locale, September 2018–February 2021



New Capacity

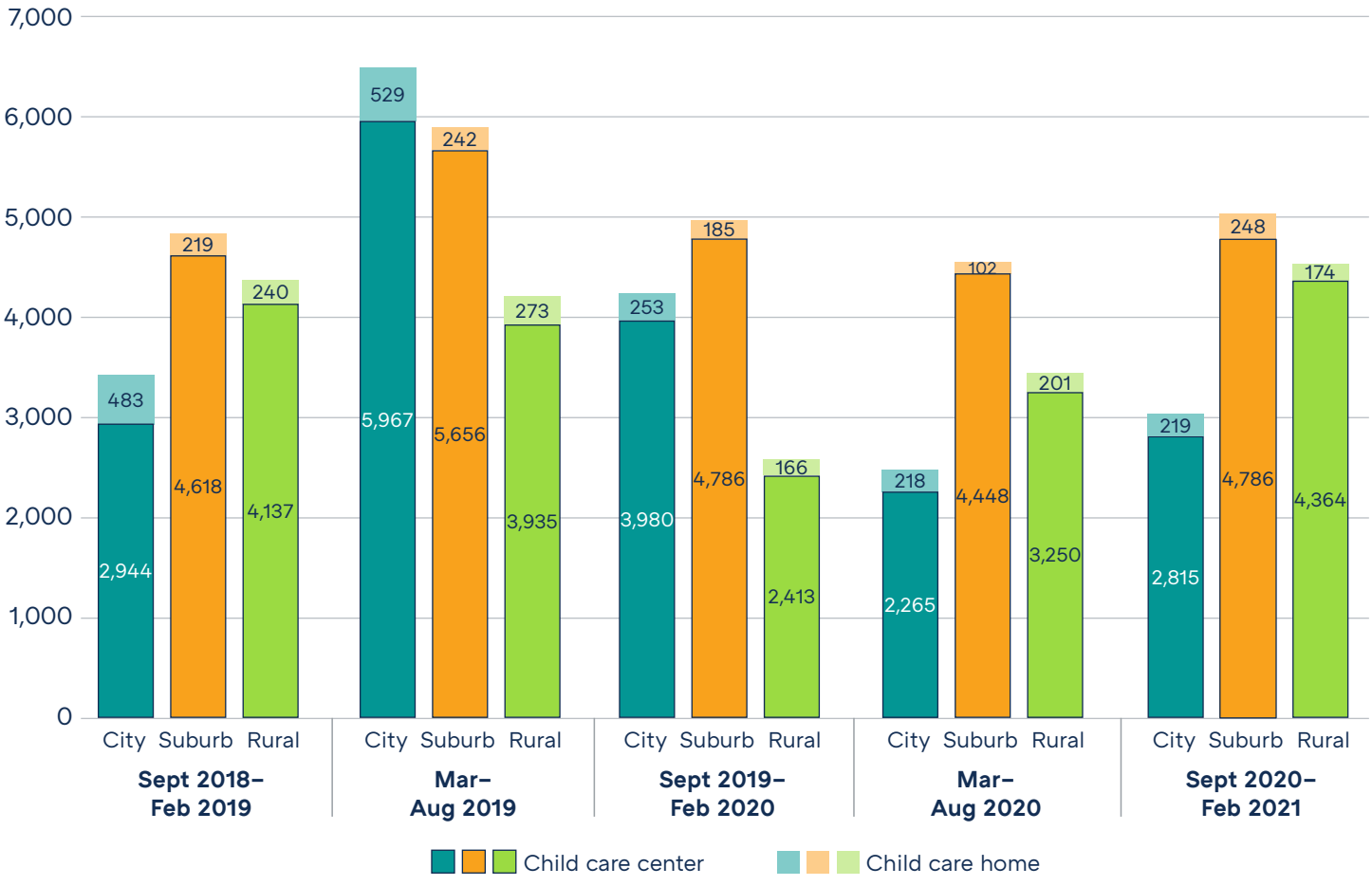
Overview. New capacity declined at the greatest rates in cities during the pandemic. Moreover, while capacity counts rebounded in Sept 2020-Feb 2021 in suburban and rural communities to meet or exceed pre-pandemic levels, they remained lower in cities. Child care homes provided a larger share of new capacity in cities compared to suburban and rural communities. For example, in Mar-Aug 2019, child care homes provided 8.1% of new capacity in cities, compared to 4.1% in suburban communities and 6.5% in rural communities.

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, new capacity in cities declined significantly, from 6,496 to 2,483 (-61.8%; Figure 2b and Table A-2b). In suburban areas, new capacity

dropped from 5,898 to 4,550 (-22.9%). Rural communities experienced the smallest declines in new provider capacity, where counts dropped from 4,208 to 3,451 (-18.0%). In cities, rates of capacity decline were similar between child care centers and child care homes (i.e., -62.0% vs. -58.8%). In suburban and rural areas, child care homes saw greater relative drops in capacity than centers across the spring/summer time periods.

Fall/Winter Trends. In Sept 2020-Feb 2021, new provider capacity in cities was 3,034, a lower count than both pre-pandemic fall/winter time periods. Declines in urban capacity occurred for both child care centers and child care homes. The opposite trend occurred in suburban and rural communities, where Sept 2020-Feb 2021 capacity was similar to, or even higher, than previous years. In rural areas, new capacity was low in Sept 2019-Feb 2020 (n=2,579) compared to Sept 2018-Feb 2019 (n=4,377), but bounced back in Sept 2020-Feb 2021 (n=4,364), despite pandemic conditions. This growth in capacity in rural areas was driven by a spike in capacity among child care centers (i.e., 80.9% growth over Sept 2019-Feb 2020). Among suburban child care homes, new capacity was higher in Sept 2020-Feb 2021 (n=248) than in any other time period examined.

FIGURE 2b. Estimated capacity of new certificates, by provider type and geographic locale, September 2018–February 2021



Trends in New Provider Supply by Community Poverty Level

New Certificates of Compliance

Overview. New certificate counts were much lower in high-poverty communities than in low-poverty communities both before and during the pandemic. At the same time, relative declines in new provider supply were greater in high-poverty communities, suggesting the pandemic may have exacerbated gaps in new provider supply for these high-need communities. Across time periods, child care homes represented a greater share of new certificates in high-poverty communities than in low-poverty communities. For example, in Sept 2019-Feb 2020, 23 of the 54 (42.6%) new certificates in high-poverty communities were for child care homes. The imbalance was even more extreme in Sept 2020-Feb 2021, where a majority of new certificates were for child care homes. This trend reflects a decline in the number of child care centers receiving new certificates in high-poverty areas. By comparison, in low-poverty communities, the share of new certificates for child care homes was low, at 17.1% (i.e., 14 of 82). These differences are notable, as provider type has significant implications for capacity.[26]

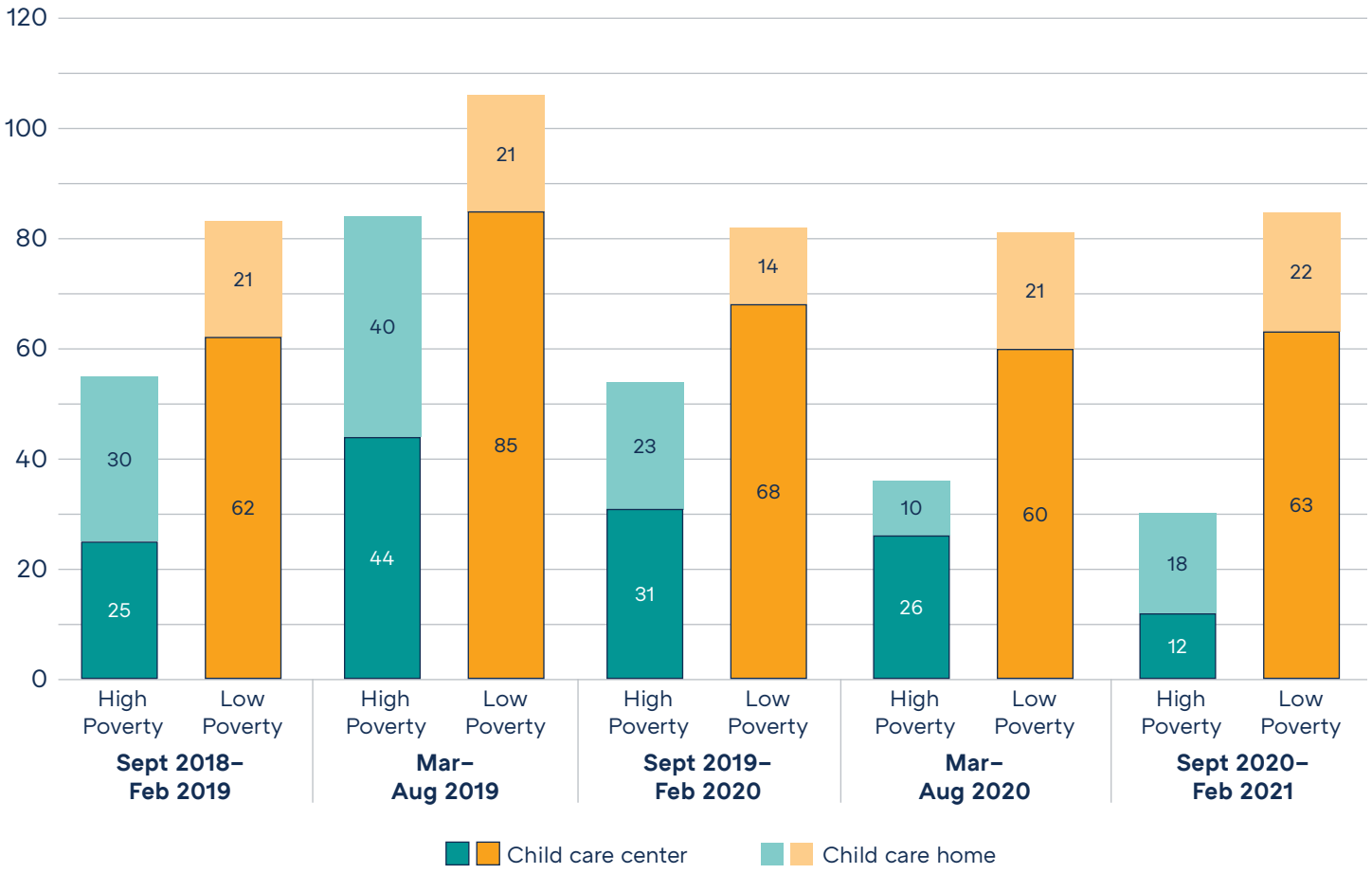
From Mar–Aug 2019 to Mar–Aug 2020, new certificate counts declined by more than half in high-poverty communities.

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, new certificate counts declined by more than half in high-poverty communities, from 84 to 36 (Figure 3a and Table A-3a). The decline was particularly steep among child care homes, where counts dropped from 40 to just 10. In low-poverty communities, certificate counts dropped from 106 to 81. In contrast with high-poverty communities, the spring/summer decline in new certificates among low-poverty communities during the pandemic was driven entirely by child care centers.

Fall/Winter Trends. In low-poverty communities, new certificate counts remained stable across fall/winter time periods, even during the pandemic. This trend persisted for both child care centers and child care homes. In contrast, in high-poverty communities, new certificate counts for both centers and homes were lower in Sept 2020-Feb 2021 than in pre-pandemic fall/winter time periods. Moreover, the Sept 2020-Feb 2021 new certificate count for high-poverty communities (n=30) was lower than the Mar-Aug 2020 count (n=36), suggesting pandemic conditions continued to take a toll on new provider supply in high-poverty communities, even as stay-at-home orders and other safety mitigation initiatives were lifted.

26 New certificate counts for communities with middle high and middle low levels of poverty can be found in the appendix (see Table A-3a).

FIGURE 3a. New certificates of compliance, by provider type and community poverty level, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4%+.

New Capacity

Overview. Across time periods, new capacity was strikingly higher in low-poverty communities than in high-poverty communities. For example, right before the pandemic in Sept 2019-Feb 2020, there were 3,397 more new enrollment slots in child care facilities in low-poverty communities than in high-poverty communities (i.e., 5,282 vs. 1,885).[27] Because capacity increased in low-poverty communities but decreased in high-poverty communities during Sept 2020-Feb 2021, that gap grew to 5,665 by the end of the first year of the pandemic (i.e., 6,683 vs. 1,018). Child care homes provided a significantly greater share of new capacity in high-poverty communities than in low-poverty communities. Across all time periods examined, child care homes provided less than 3.5% of all new capacity in low-poverty communities. By comparison, child care homes' share of new capacity in high-poverty communities ranged from 6.7-14.9%.

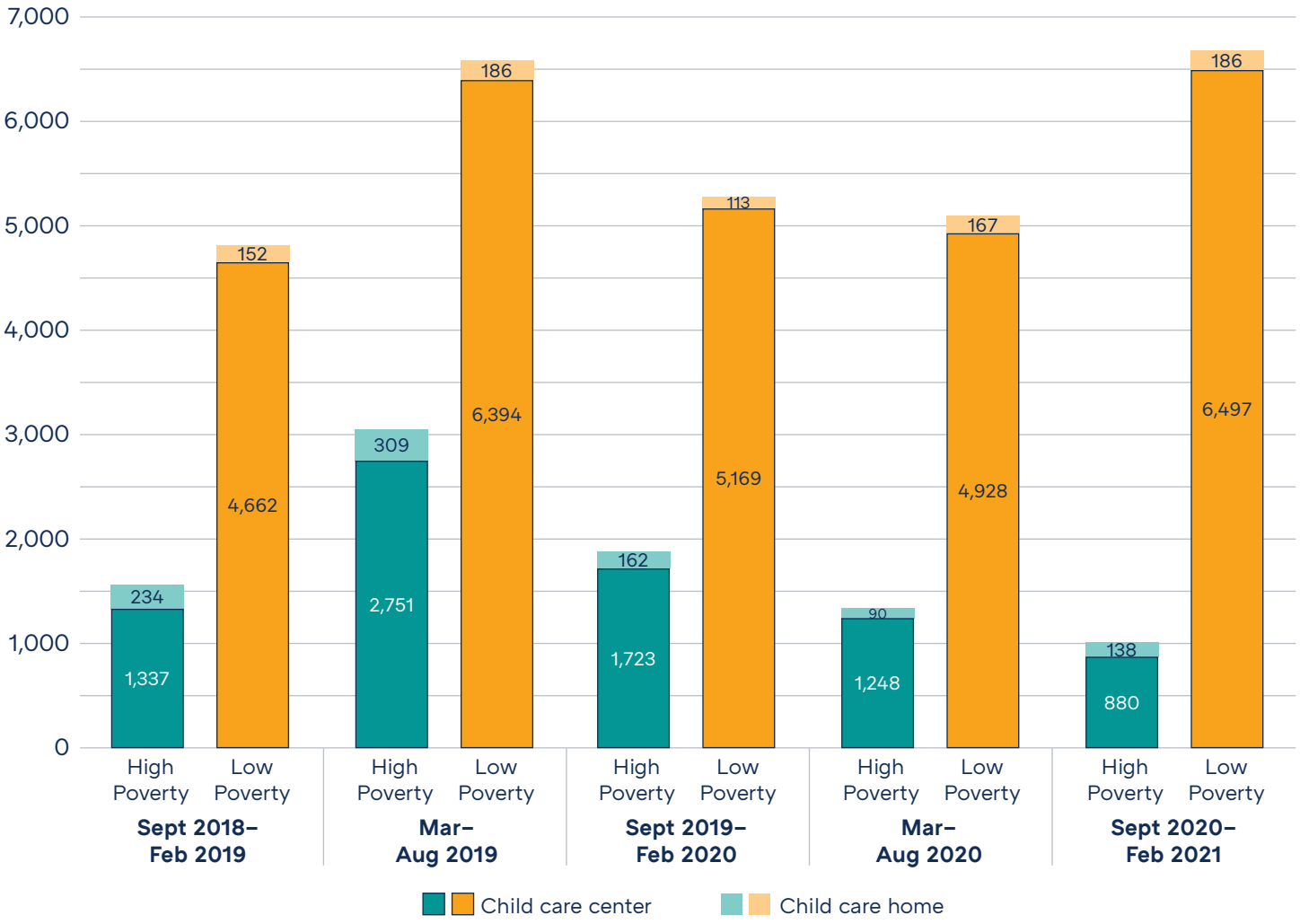
Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, capacity dropped by 56.3% in high-poverty communities, from 3,060 to 1,338 (Figure 3b and Table A-3b). Within high-poverty

27 We reiterate that estimated capacity counts are based on the number of children providers are legally permitted to enroll, based on the square footage of their facilities and the ages of children they serve, and not actual enrollments.

communities, the rate of decline was greater among child care homes (-70.9%), as new capacity fell from 309 to 90. In low-poverty communities, capacity decreased by 22.6% during that time period, from 6,580 to 5,095, with a larger relative decline among child care centers.

Fall/Winter Trends. In Sept 2020-Feb 2021, new capacity was 1,018 in high-poverty communities, a 46.0% decline from Sept 2019-Feb 2020. New child care center capacity in high-poverty communities was far below previous years. In contrast, new capacity in low-poverty communities was 6,683 in Sept 2020-Feb 2021, a higher count than the two pre-pandemic fall/winter time periods. New capacity counts in low-poverty communities were higher for both child care centers and child care homes. These trends suggest new provider supply may be increasing over time in low-poverty communities, while decreasing in high-poverty areas.

FIGURE 3b. Estimated capacity of new certificates, by provider type and community poverty level, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4%+.

Trends in New Provider Supply by Community Racial Composition

New Certificates of Compliance

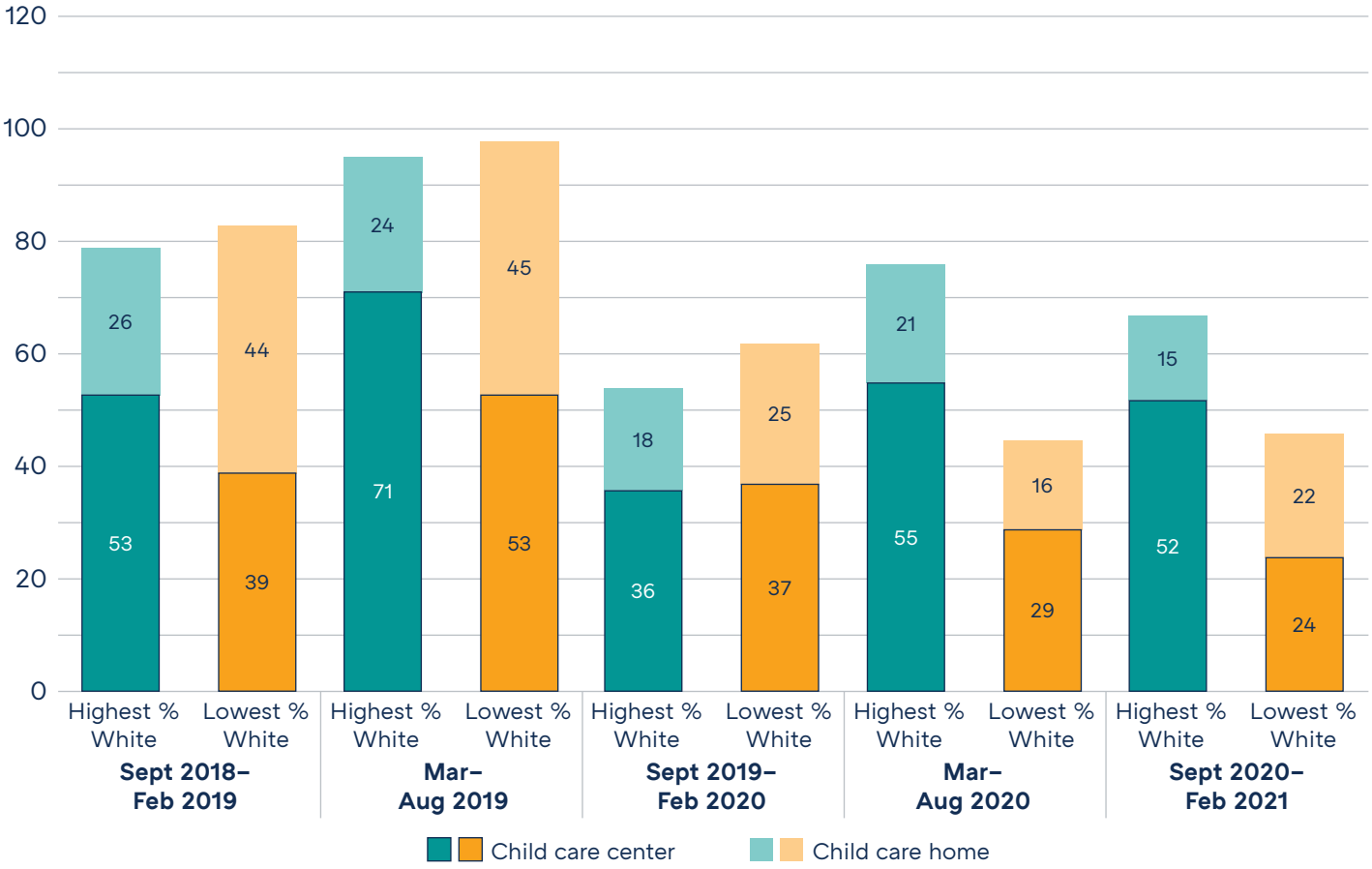
Overview. Prior to the pandemic, new certificate counts were slightly higher in communities of color (i.e., communities with the lowest percentages of White residents) than in predominantly White communities (i.e., communities with the highest percentages of White residents). However, during the pandemic time periods examined here, that trend flipped. This reversal was driven in part by greater relative declines in new certificate counts for communities of color. Child care homes were a substantially higher share of new certificates in communities of color, compared to predominantly White communities. For example, in Mar-Aug 2019, 45.9% of new certificates were for child care homes in communities of color, compared to 25.3% in predominantly White communities.

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, new certificate counts dropped substantially in communities of color, from 98 to 45 (Figure 4a and Table A-4a). By comparison, in predominantly White communities, new certificates decreased from 95 to 76. Put more simply, in Mar-Aug 2019, new certificate counts in predominantly White communities and communities of color were nearly even. But a year later, during the pandemic, communities of color had far fewer new providers. In communities of color, new child care home certificate counts took a particularly notable drop between spring/summer time periods, from 45 to 16. In predominantly White communities, new child care home certificate counts were comparable between Mar-Aug 2019 and Mar-Aug 2020, while new child care center certificate counts decreased from 71 to 55.

Fall/Winter Trends. In Sept 2020-Feb 2021, predominantly White communities had 67 new provider certificates, an increase from Sept 2019-Feb 2020 (n=54) but a decrease from Sept 2018-Feb 2019 (n=79).[28] Fifty-two new certificates were approved for child care centers in Sept 2020-Feb 2021, a number nearly equal to the Sept 2018-Feb 2019 count. In contrast, the new certificate count in communities of color in Sept 2020-Feb 2021 (n=46) was far below both pre-pandemic fall/winter time periods. In particular, the new child care center certificate count for communities of color decreased notably from Sept 2019-Feb 2020 (n=37) to Sept 2020-Feb 2021 (n=24).

28 The new certificate count for predominantly White communities was notably low in Sept 2019-Feb 2020, particularly for child care centers (i.e., 54 total, and 36 centers). It is unclear what caused this precipitous drop.

FIGURE 4a. New certificates of compliance, by community racial composition and provider type, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

New Capacity

Overview. Both before and during the pandemic, new capacity counts were substantially higher in predominantly White communities compared to communities of color. New capacity counts dropped for all communities in Mar-Aug 2020, and while they rebounded in predominantly White communities in Sept 2020-2021, they continued to decline in communities of color. Child care homes made up a much larger share of new capacity in communities of color compared to predominantly White communities. For example, in Mar-Aug 2019, 11.3% of new capacity in communities of color was provided by child care homes, compared to 4.7% in predominantly White communities.

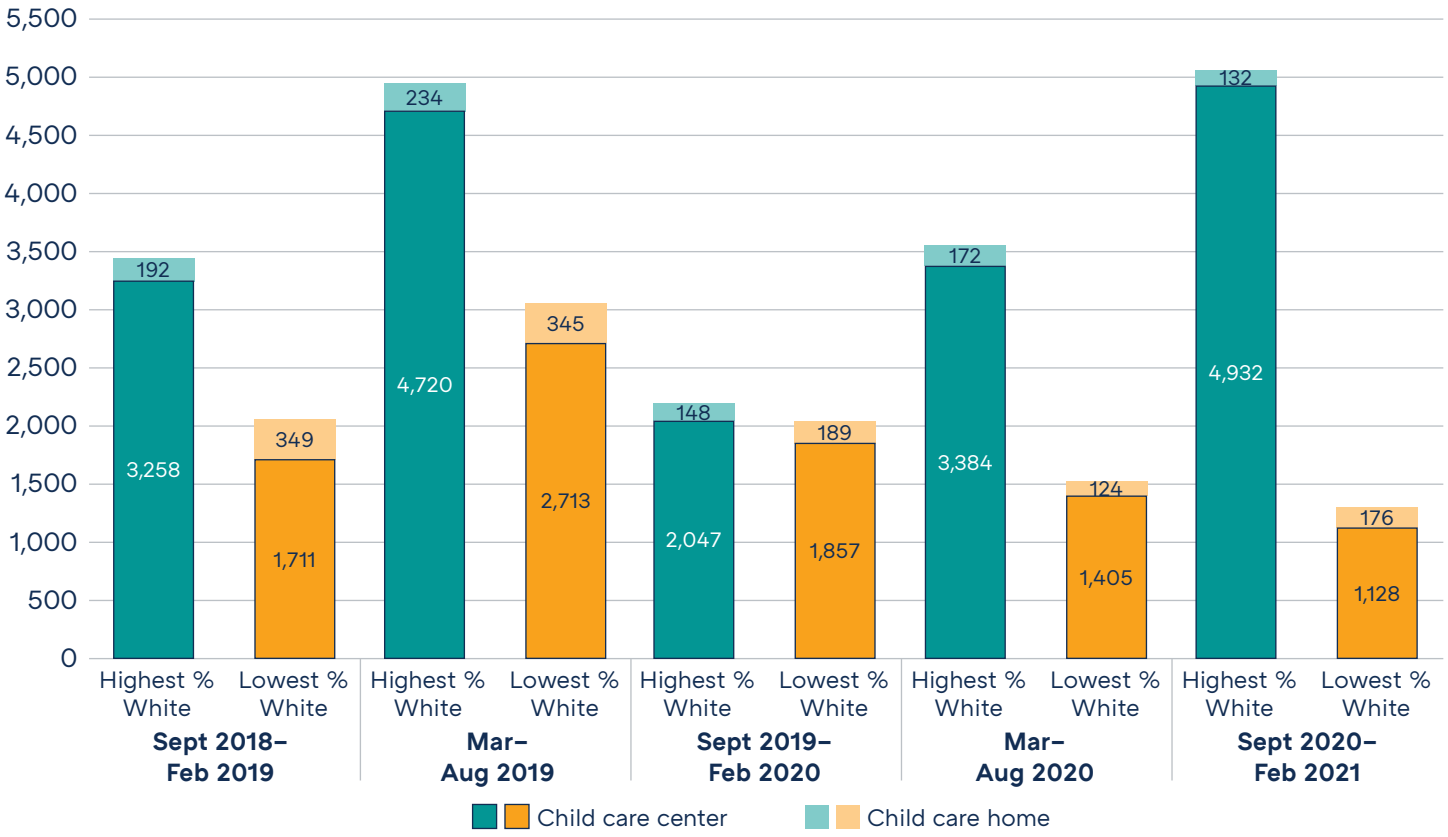
Both before and during the pandemic, new capacity counts were substantially higher in predominantly White communities compared to communities of color.

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, new capacity dropped from 4,954 to 3,556 (-28.2%) in predominantly White communities (Figure 4b and Table A-4b). Relative declines were even between child care centers (-28.3%) and child care homes (-26.5%). By comparison, the rate of decline in new capacity

was much greater in communities of color, at 50.0% (i.e., 3,058 to 1,304). In communities of color, capacity dropped among child care homes at a particularly steep rate of 64.1%.

Fall/Winter Trends. In predominantly White communities, new capacity was higher during the pandemic fall/winter time period (n=5,064) than in previous ones, especially for child care centers (n=4,932). In contrast, in communities of color, new capacity was only 1,304 in Sept 2020-Feb 2021, a substantial decrease from Sept 2018-Feb 2019 (n=2,060) and Sept 2019-Feb 2020 (n=2,046). In communities of color, the new capacity count for child care homes in Sept 2020-Feb 2021 (n=176) was not too far below Sept 2019-Feb 2020 (n=189). However, capacity in child care centers — the provider type that accounts for the vast majority of all new capacity — was down by 39.3%.

FIGURE 4b. Estimated capacity of new certificates, by community racial composition and provider type, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

Summary of Trends in New Provider Supply

At the state level, new certificate and capacity counts dropped substantially during the early months of the pandemic. New capacity counts rebounded in Sept 2020-Feb 2021, though new certificate counts remained relatively low compared to pre-pandemic counts. Notably, the magnitude of these changes in new provider supply varied substantially by community characteristics. Cities, high-poverty communities, and communities of color[29] experienced greater relative declines in both new certificate counts and new capacity during pandemic time periods, compared to rural and suburban communities, low-poverty communities, and predominantly White communities.[30] And while new provider supply rebounded in many communities in Sept 2020-Feb 2021, new certificate and capacity counts were lower than both previous fall/winter time periods in high-poverty communities and communities of color. This finding may suggest that the pandemic had a greater long-term effect on high-poverty communities and communities of color – including the ability of new businesses to open – even as stay-at-home orders and other safety restrictions were lifted. Racial differences in levels of concern and cautiousness around COVID-19 may also have influenced this trend, at least in communities of color, with research showing Black and Hispanic adults were more likely than White adults to worry about infection and to favor safety initiatives (e.g., masking).[31] These concerns may have led would-be child care providers in these communities to delay the opening of new facilities during the pandemic time periods examined in this study. At the same time, new certificate and capacity counts were low in high-poverty communities and communities of color even before the pandemic. This finding of consistent gaps in new provider supply for high-poverty communities and communities of color suggests a need for more resources to be targeted to these communities to support potential child care providers, above and beyond what may be needed to aid pandemic recovery. Because in many parts of Pennsylvania poverty is concentrated in communities of color, these converging trends among high-poverty communities and communities of color may represent overlapping populations.

29 Communities of color are communities with the lowest percentages of White residents, as designated by quartiles. In these communities, 0-34.7% of residents are White.

30 Predominantly White communities are communities with the highest percentages of White residents, as designated by quartiles. In these communities, 89.1% or more of residents are White.

31 Hearne, B. N., & Niño, M. D. (2021). Understanding how race, ethnicity, and gender shape mask-wearing adherence during the COVID-19 pandemic: evidence from the COVID impact survey. *Journal of racial and ethnic health disparities,* 1-8; PBS. (2022, April 29). Racial split on COVID-19 endures as restrictions ease in U.S. Retrieved from https://www.pbs.org/newshour/health/racial-split-on-covid-19-endures-as-restrictions-ease-in-us

Findings for Existing Provider Supply

We measure existing provider supply in terms of the number of applications for certificate renewal approved by Pennsylvania's Office of Child Development and Early Learning (OCDEL). To renew a certificate of compliance, providers must submit an application prior to the date when their current certificate expires. Certificates must be renewed annually. All certified child care providers in Pennsylvania are also subject to annual renewal inspections of their facilities to ensure providers are in full compliance with regulatory requirements.

In our analysis of existing provider supply, we discuss trends in the number of applications submitted for certificate renewal as well as the estimated capacity that would result from these providers continuing operation.[32] We describe changes in the raw number of certificate renewals, as well as relative changes (i.e., percent changes) in these numbers over time. To simplify our explanations of the data, we often refer to September-February time periods as fall/winter, and March-August time periods as spring/summer. We also group providers with STAR 1 and STAR 2 ratings together (i.e., "STAR 1/2") and STAR 3 and STAR 4 ratings together (i.e., "STAR 3/4").[33]

Factors associated with the pandemic may have influenced providers' ability to renew their certificates of compliance. While state agencies adapted inspection policies to allow for remote assessment of regulatory compliance, such new procedures may have been challenging to navigate.[34]

An analysis of trends in existing provider supply is necessary for understanding the broader picture of child care supply in Pennsylvania. To best understand this broader picture, findings in this section should be considered alongside findings for new provider supply (prior findings section) and lost provider supply (subsequent findings sections).

State-Level Trends in Existing Provider Supply

Certificate renewals

Overview. At the state level, certificate renewal counts dropped substantially during Mar-Aug 2020, but rebounded in Sept 2020-Feb 2021 to match – and even surpass – pre-pandemic renewal counts. Child care centers are the predominant provider type in Pennsylvania, and more child care centers than child care homes applied for certificate renewal during all time periods examined (Figure 5a and Table A-5). Child care centers' share of total renewals remained stable over time. For example, before the pandemic in Mar-Aug 2019 and Sept 2019-Feb 2020, child care centers made up 65.4% and 65.5% of all renewal applications, respectively. During the pandemic, those shares were 67.5% and 66.7% in Mar-Aug 2020 and Sept 2020-Feb 2021, respectively. Providers with STAR 1/2 ratings represent the vast majority of all

32 Licensed capacity is defined as the maximum number of children permitted to receive care in a child care facility at one time, based on the square footage of the child care space and the age of the children served. Providers' licensed capacities do not necessarily match the actual number of children they choose to enroll. Accordingly, we consider our capacity counts to be estimates of the potential number of children providers could enroll, if they operated at maximum licensed capacity.

33 According to OCDEL, providers with STAR 3 and STAR 4 ratings are considered "high quality" and are likely to share certain characteristics that make them compatible as a combined group.

34 Pennsylvania Department of Human Services. Alternative techniques for measuring regulatory compliance in response to COVID-19, March 16, 2020.

providers in the state, and far more STAR 1/2 providers applied for certificate renewals, compared to STAR 3/4 providers (Figure 5b and Table A-5). STAR 1/2 providers' share of total renewals remained consistent across time periods. For example, they represented 75.6% of all renewals in Sept 2019-2020, 73.5% in Mar-Aug 2020, and 75.9% in Sept 2020-Feb 2021.

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, the number of certificate renewals fell by 24.4%, from 3,340 to 2,526. Child care homes experienced a greater relative decline in renewals compared to child care centers. The number of certificate renewals submitted for child care homes decreased from 1,154 to 820 (-28.9%), while counts for child care centers dropped from 2,186 to 1,706 (-22.0%). Certificate renewals declined at a greater rate among STAR 1/2 providers compared to STAR 3/4 providers. From Mar-Aug 2019 to Mar-Aug 2020, certificate renewals fell from 2,553 to 1,856 (-27.3%) for STAR 1/2 providers, and from 787 to 670 (-14.9%) for STAR 3/4 providers.

Fall/Winter Trends. Certificate renewal counts were stable across fall/winter time periods, even during the pandemic. In Sept 2020-Feb 2021, providers submitted 3,503 applications for certificate renewal, an increase of 2.8% over Sept 2019-Feb 2020 when the count was 3,408. This bump in certificate renewals was driven by increases among child care centers. In Sept 2020-Feb 2021, the number of renewals for child care centers was 2,335, up from 2,159 in Sept 2018-Feb 2019 and 2,230 in Sept 2019-Feb 2020. In contrast, certificate renewals among child care homes were slightly lower in Sept 2020-Feb 2021 than in pre-pandemic time periods. Renewal counts were slightly greater in Sept 2020-Feb 2021 than in pre-pandemic fall/winter time periods for providers with both STAR 1/2 and STAR 3/4 ratings. Among STAR 1/2 providers, renewal counts were 2,660 in Sept 2020-Feb 2021, up 3.3% from Sept 2019-Feb 2020. For STAR 3/4 providers, renewal counts were up 1.3% in Sept 2020-Feb 2021, compared to the prior fall/winter time period.

FIGURE 5a. Number of certificate renewals, by provider type, September 2018–February 2021

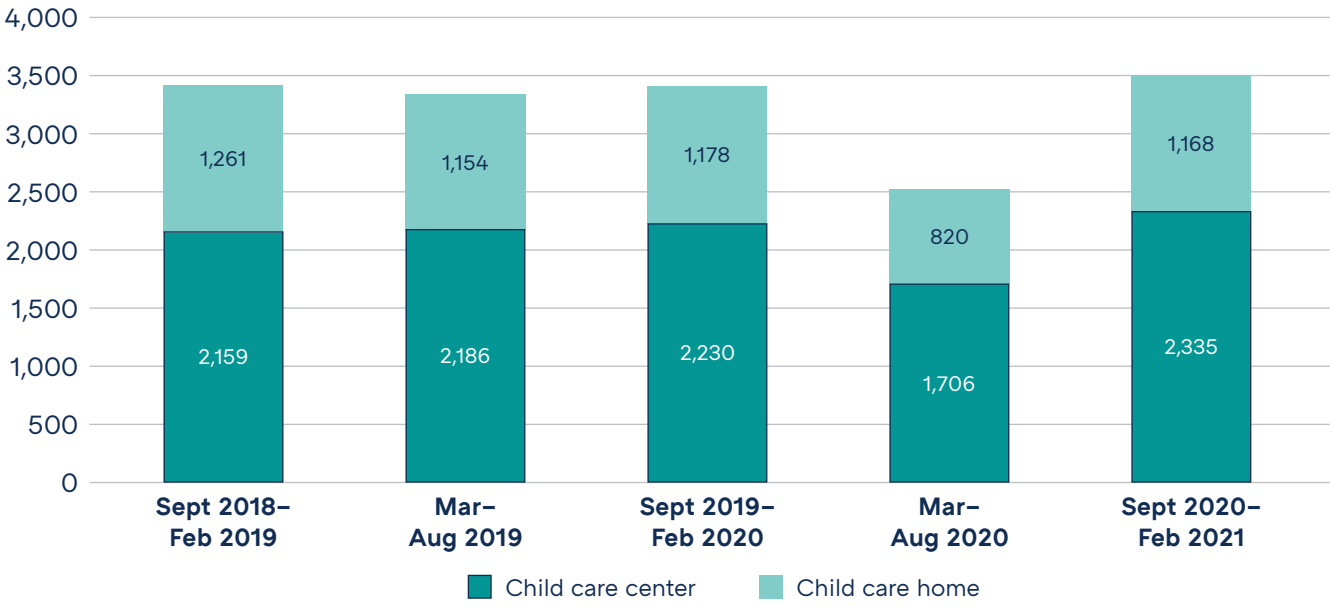
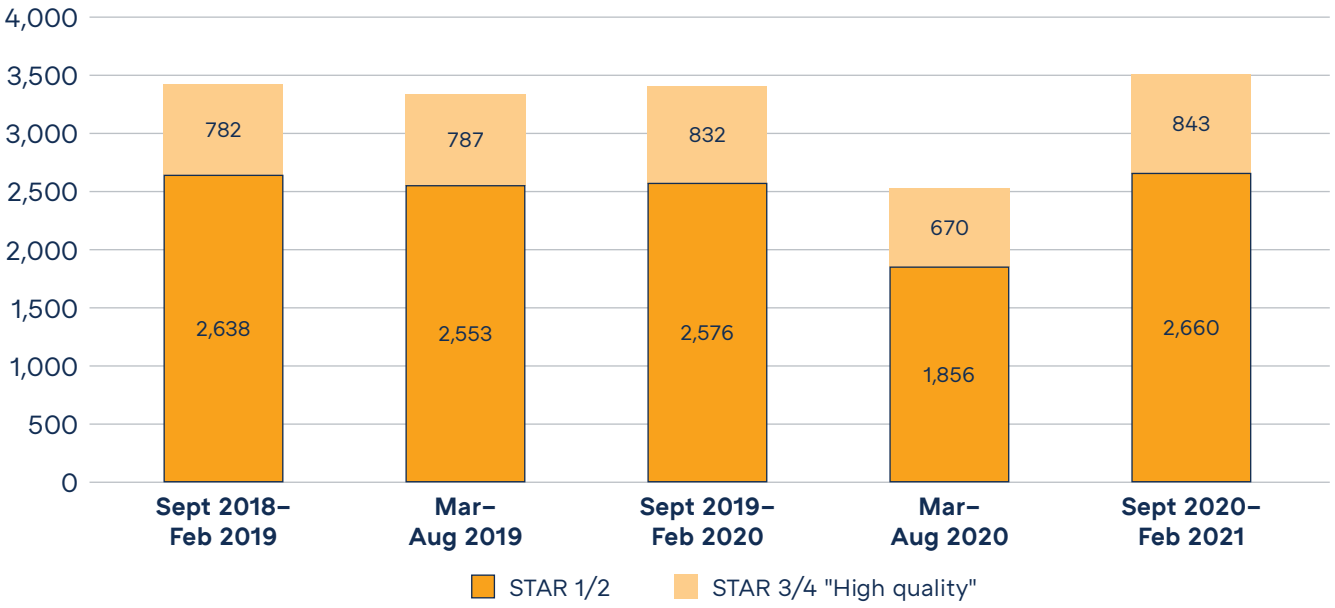


FIGURE 5b. Number of certificate renewals, by STAR rating, September 2018–February 2021



Existing Capacity

Overview. At the state-level, existing capacity dropped substantially during Mar-Aug 2020, but recovered quickly to exceed pre-pandemic levels in Sept 2020-Feb 2021. The vast majority of existing capacity was provided by child care centers. For example, child care centers accounted for 95.7% of all existing capacity in Sept 2019-Feb 2020, and 96.0% in both Mar-Aug 2020 and Sept 2020-Feb 2021 (Figure 5c and Table A-5). While STAR 3/4 providers accounted for only a quarter of renewal certifications, they were around 60% of existing capacity, an indication that these providers were more likely to be larger centers that could enroll more children (Figure 5d and Table A-5).

At the state-level, existing enrollment capacity dropped substantially during Mar–Aug 2020, but recovered quickly to exceed pre-pandemic levels in Sept 2020–Feb 2021.

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, existing capacity fell from 202,033 to 224,233, a decline of 19.2%. Child care homes experienced a greater relative decline (27.8%), as their existing capacity dropped from 9,090 to 6,563. Existing capacity in child care centers decreased from 192,943 to 156,686 (-18.8%). Existing capacity declined at the smallest rate among STAR 3/4 providers, where it fell by 14.4% (i.e., 79,265 to 67,875. Among STAR 1/2 providers, existing capacity decreased from 122,768 to 95,374 (-22.3%) over the two spring/summer time periods.

Fall/Winter Trends. Existing capacity was 224,233 in Sept 2020-Feb 2021, a higher count than both pre-pandemic fall/winter time periods and a 7.3% increase over Sept 2019-Feb 2020. That growth came largely from child care centers, where existing capacity was 215,183 in Sept 2020-Feb 2021. Capacity in child care homes was 9,050 in Sept 2020-Feb 2021, a higher count compared to Sept 2019-Feb 2020 but lower than in Sept 2018-Feb 2019. Relative growth in existing capacity was greater among STAR 1/2 providers compared to STAR 3/4 providers in Sept 2020-Feb 2021,

a reversal of spring/summer capacity trends. In Sept 2020-Feb 2021, existing capacity was 132,006 for STAR 1/2 providers, a 9.9% increase over the prior fall/winter time period. Existing capacity with STAR 3/4 providers was 92,227 in Sept 2020-Feb 2021, a 3.8% increase over Sept 2019-Feb 2020.

FIGURE 5c. Estimated capacity of certificate renewals, by provider type, September 2018-February 2021

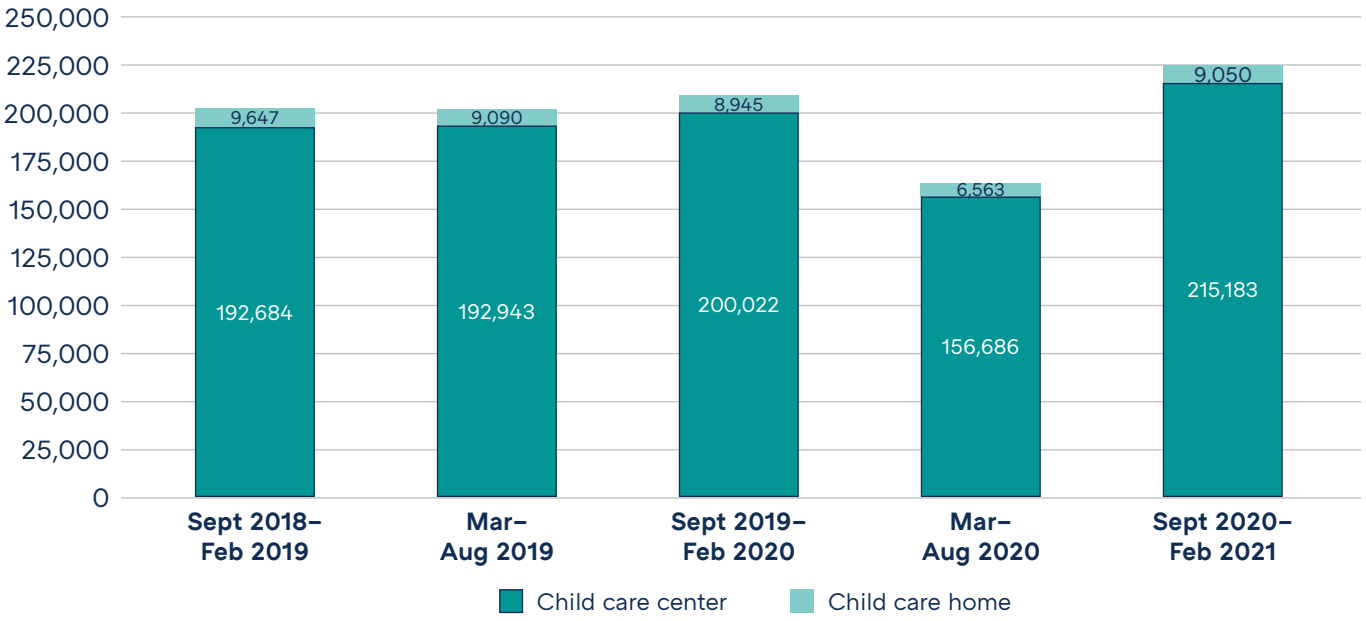
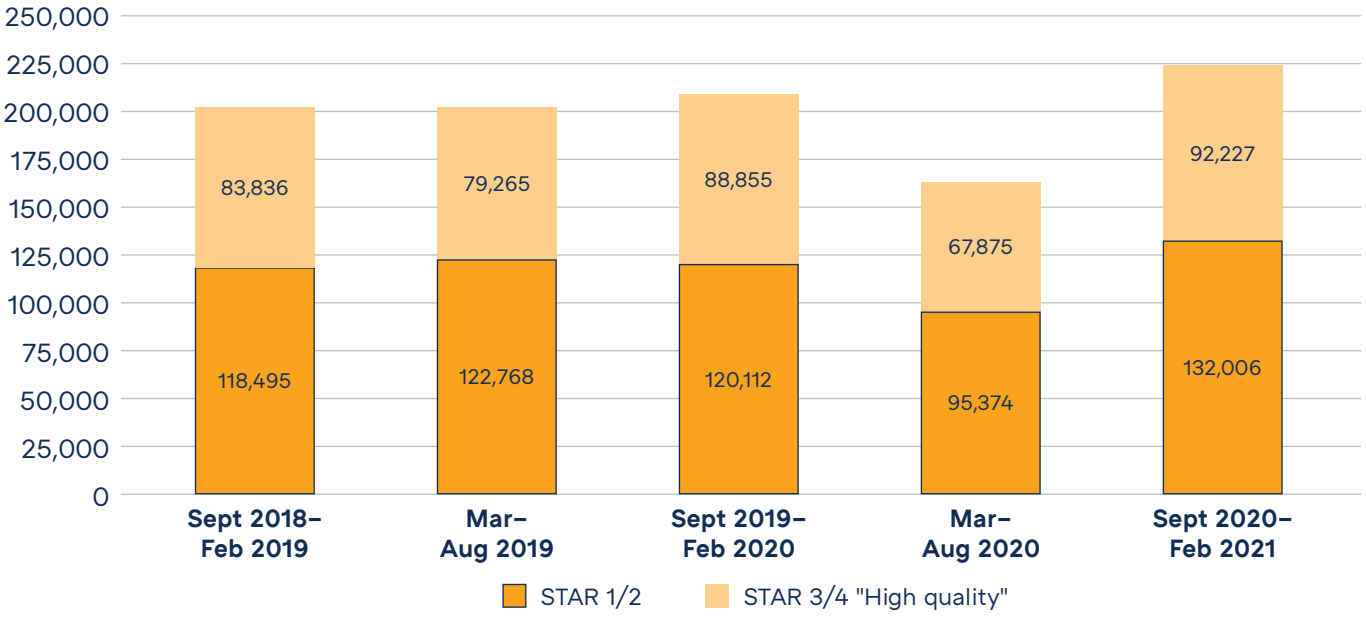


FIGURE 5d. Estimated capacity of certificate renewals, by STAR rating, September 2018–February 2021



Trends in Existing Provider Supply by Geographic Locale

Certificate renewals

Overview. Prior to the pandemic, rural communities had the highest counts of certificate renewals, and suburban communities the lowest. In Mar-Aug 2020, renewal counts were lowest in cities and highest in rural communities, though the number of certificate renewals coming from urban providers rebounded in Sept 2020-Feb 2021. Child care centers made up a larger share of certificate renewals in suburban areas compared to urban and rural communities. For example, in Sept 2019-Feb 2020 and Sept 2020-Feb 2021, centers accounted for 73.0% and 74.5% of all certificate renewals in the suburbs, respectively, compared to 61.2% and 61.5% in cities, and 62.7% and 64.1% in rural communities (Figure 6a and Table A-6a). STAR 3/4 providers' shares of certificate renewals were similar in suburban and rural communities in all fall/winter time periods (i.e., 25-26%), while that proportion was slightly lower in cities (i.e., 22%; see Figure 6b and Table A-6a).

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, certificate renewal counts declined at the greatest rate in cities and at the smallest rate in rural areas. The number of certificate renewals submitted by urban providers decreased from 1,129 to 776 (-31.3%), while it dropped from 1,188 to 956 among rural providers (-19.5%). In the suburbs, certificate renewal counts fell from 1,023 to 787 (-23.1%).

For both child care centers and child care homes, relative declines in certificate renewals were greatest in cities. In urban and rural communities, relative declines were greater among child care homes compared to child care centers, while the opposite was true in suburban areas. In cities, certificate renewals declined by 25.7% among centers and by 39.2% among homes. Compared to urban areas, declines for both provider types were smaller in rural areas, at 17.7% for centers and 22.7% for homes. In the suburbs, renewals decreased by 23.8% and 20.9% for centers and homes, respectively, from Mar-Aug 2019 to Mar-Aug 2020.

In urban and rural communities, declines in certificate renewals were far greater among STAR 1/2 providers compared to STAR 3/4 providers, while in the suburbs relative declines by quality rating were even. In cities, certificate renewals dropped by 34.5% among STAR 1/2 providers and by 17.5% among STAR 3/4 providers. Relative declines in certificate renewals were much smaller in rural communities than in cities for both groups, where they decreased by 23.9% for STAR 1/2 providers and by just 6.9% for STAR 3/4 providers. The number of certificate renewals submitted by suburban providers decreased by 23.1% among those with STAR 1/2 ratings. Suburban communities experienced the greatest relative decline in STAR 3/4 provider renewals, at 23.0%.

Fall/Winter Trends. In urban and suburban communities, renewal counts in Sept 2020-Feb 2021 were greater than their pre-pandemic fall/winter counts. In cities, there were 1,177 certificate renewals submitted in Sept 2020-Feb 2021, an increase of 3.0% over Sept 2019-Feb 2020. Suburban providers submitted 1,150 certificate renewal applications in Sept 2020-Feb 2021, an increase of 6.1% over the prior fall/winter time period. In contrast, in rural areas, certificate renewal counts in Sept 2020-Feb 2021 were down slightly (-0.4%) compared to previous fall/winter time periods.

Across geographic locales, certificate renewal counts among child care centers increased in Sept 2020-Feb 2021 compared to pre-pandemic fall/winter time periods. Suburban communities experienced the greatest relative increase in renewals from Sept 2019-Feb 2020 to Sept 2020-Feb 2021 (8.3%) and rural areas the smallest (1.9%). Among child care homes, there was no consistent trend, as counts increased slightly for urban providers, stayed the same for suburban ones, and decreased slightly for rural providers.

Among STAR 1/2 providers, certificate renewal counts in Sept 2020-Feb 2021 were higher compared to the previous fall/winter time period in urban, suburban, and rural communities alike. While renewal counts increased slightly for STAR 3/4 providers in urban and suburban communities in Sept 2020-Feb 2021, they dropped slightly among STAR 3/4 providers in rural communities.

FIGURE 6a. Number of certificate renewals, by provider type and geographic locale, September 2018–February 2021

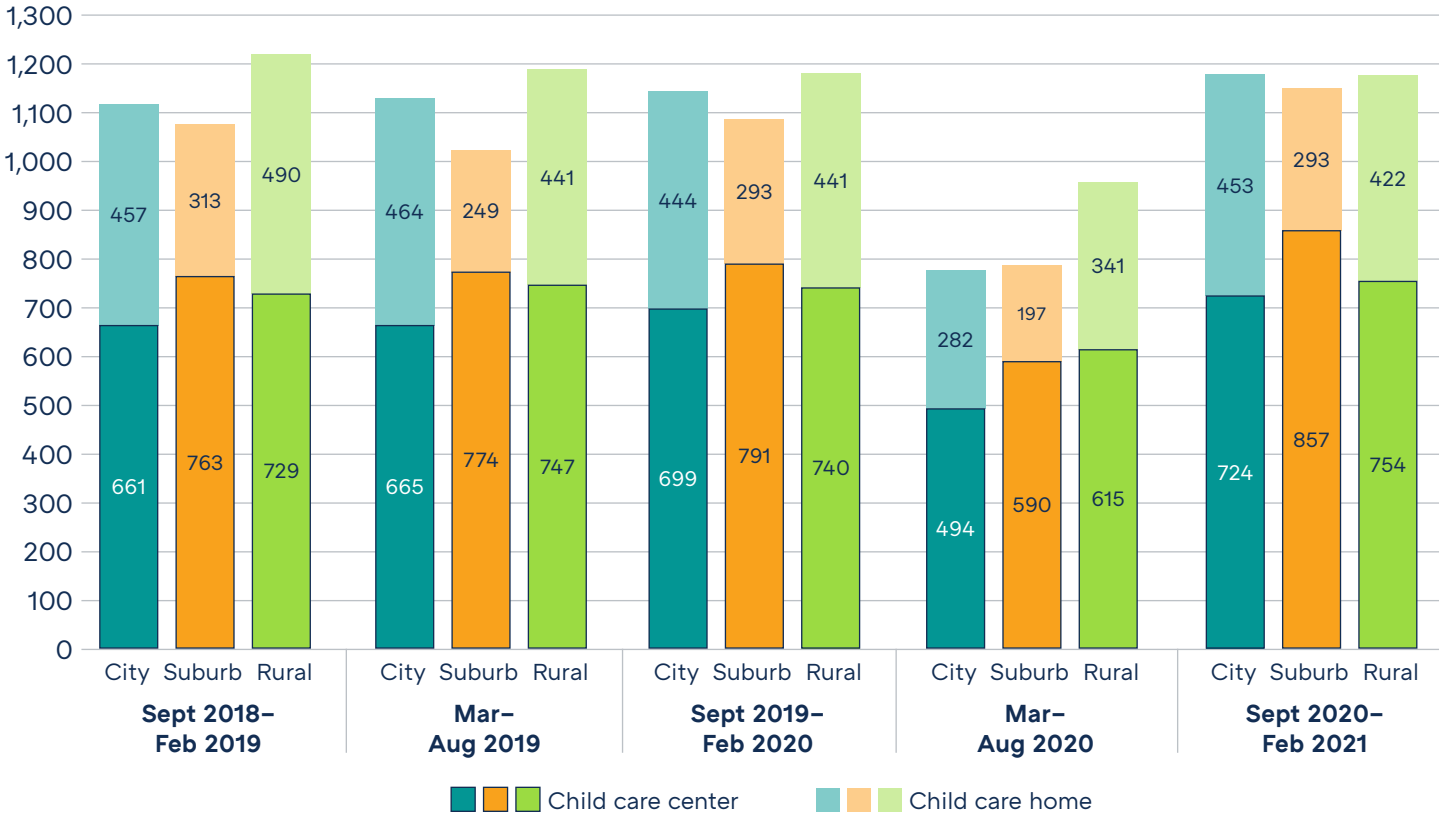
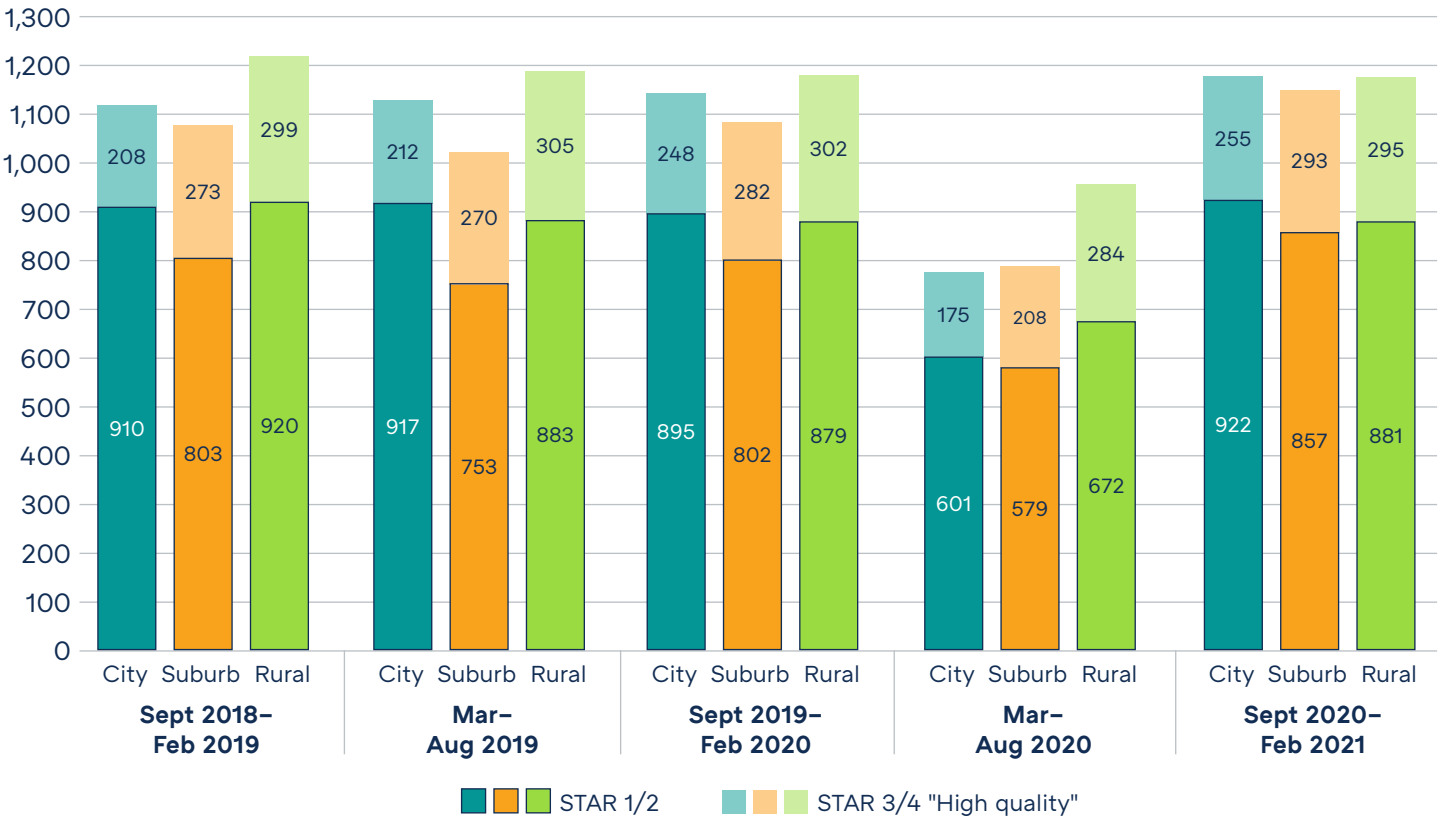


FIGURE 6b. Number of certificate renewals, by STAR rating and geographic locale, September 2018–February 2021



Existing Capacity

Overview. Both before and during the pandemic, suburban communities had the highest existing capacity counts and urban communities the lowest. Child care centers provided the vast majority of existing capacity across locales, though home providers' shares of existing capacity were higher in urban and rural communities (i.e., 4.8-6.2%) compared to suburban ones (i.e., 2.6%; see Figure 6c and Table A-6b). Within each locale group, STAR 3/4 providers' shares of existing capacity fluctuated to some degree (e.g., in cities, they were 35.2% of existing capacity in Mar-Aug 2019 but 43.3% in Sept 2019-Feb 2020), though suburban communities tended to have slightly lower percentages of STAR 3/4 capacity compared to other locales (Figure 6d and Table A-6b).

Both before and during the pandemic, suburban communities had the highest existing capacity counts and urban communities the lowest.

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, relative declines in existing capacity were greatest in cities and smallest in rural communities. In cities, existing capacity decreased rom 56,812 to 42,209 (-25.7%); in the suburbs it decreased from 76,796 to 61,389 (-20.1%); and in rural areas it decreased from 68,425 to 59,279 (-13.4%).

Across all locales, rates of decline in existing capacity were greater among child care homes compared to child care centers. Urban providers of both types experienced relatively greater

declines compared to like providers in suburban and rural areas. From Mar-Aug 2019 to Mar-Aug 2020, existing capacity in urban child care centers dropped by 24.9%, and in child care homes it fell by 37.2%. By comparison, existing capacity declined in centers by 20.0% and 12.9% in suburban and rural areas, respectively. And in both suburban and rural child care homes, existing capacity decreased by 21.9%.

As with certificate renewals, declines in existing capacity were far greater among urban and rural providers with STAR 1/2 ratings compared to those with STAR 3/4 ratings, while in suburban areas the reverse occurred. In cities, existing capacity among STAR 1/2 providers decreased by 31.9%, and among STAR 3/4 providers it fell by 14.2%. Declines were smaller in rural communities, where existing capacity dropped by 20.2% and 4.2% for STAR 1/2 and STAR 3/4 providers, respectively. In the suburbs, existing capacity among STAR 1/2 providers declined by 16.9%, the smallest decline for STAR 1/2 providers in any locale. At the same time, existing capacity among suburban STAR 3/4 providers fell by 25.0%, the greatest decline for STAR 3/4 providers of any locale group.

Fall/Winter Trends. Existing capacity counts bounced back across locales in Sept 2020-Feb 2021 to slightly exceed pre-pandemic levels. Suburban communities experienced the greatest relative increase in existing provider capacity, and rural communities the smallest. In Sept 2020-Feb 2021, existing capacity was 63,159 in cities, a 5.2% increase over the prior fall/winter time period. In suburban communities, existing capacity was 90,739, an increase of 11.7% over Sept 2019-Feb 2020. Existing capacity among rural providers increased by 3.8%, to 70,335.

Existing capacity counts increased the most from Sept 2019-Feb 2020 to Sept 2020-Feb 2021 for child care centers located in the suburbs (12.0%), while rural centers had the smallest increase (4.0%). Across locales, increases in existing capacity among child care homes were smaller compared to centers. In rural areas, capacity counts for home-based providers were actually lower in Sept 2020-Feb 2021 than in Sept 2019-Feb 2021.

In all locales, relative increases in existing capacity were greater among STAR 1/2 providers compared to STAR 3/4 providers, with larger gaps between the two groups observed in suburban and rural areas. For example, in the suburbs, existing capacity increased by 15.4% from Sept 2019-Feb 2020 to Sept 2020-Feb 2021 for STAR 1/2 providers, while among STAR 3/4 providers the increase was 6.5%. In rural communities, STAR 3/4 providers' existing capacity count was even a hair lower in Sept 2020-Feb 2021 compared to the prior fall/winter time period (i.e., 29,760 vs. 29,775).

FIGURE 6c. Estimated capacity of certificate renewals, by provider type and geographic locale, March 2019–February 2021

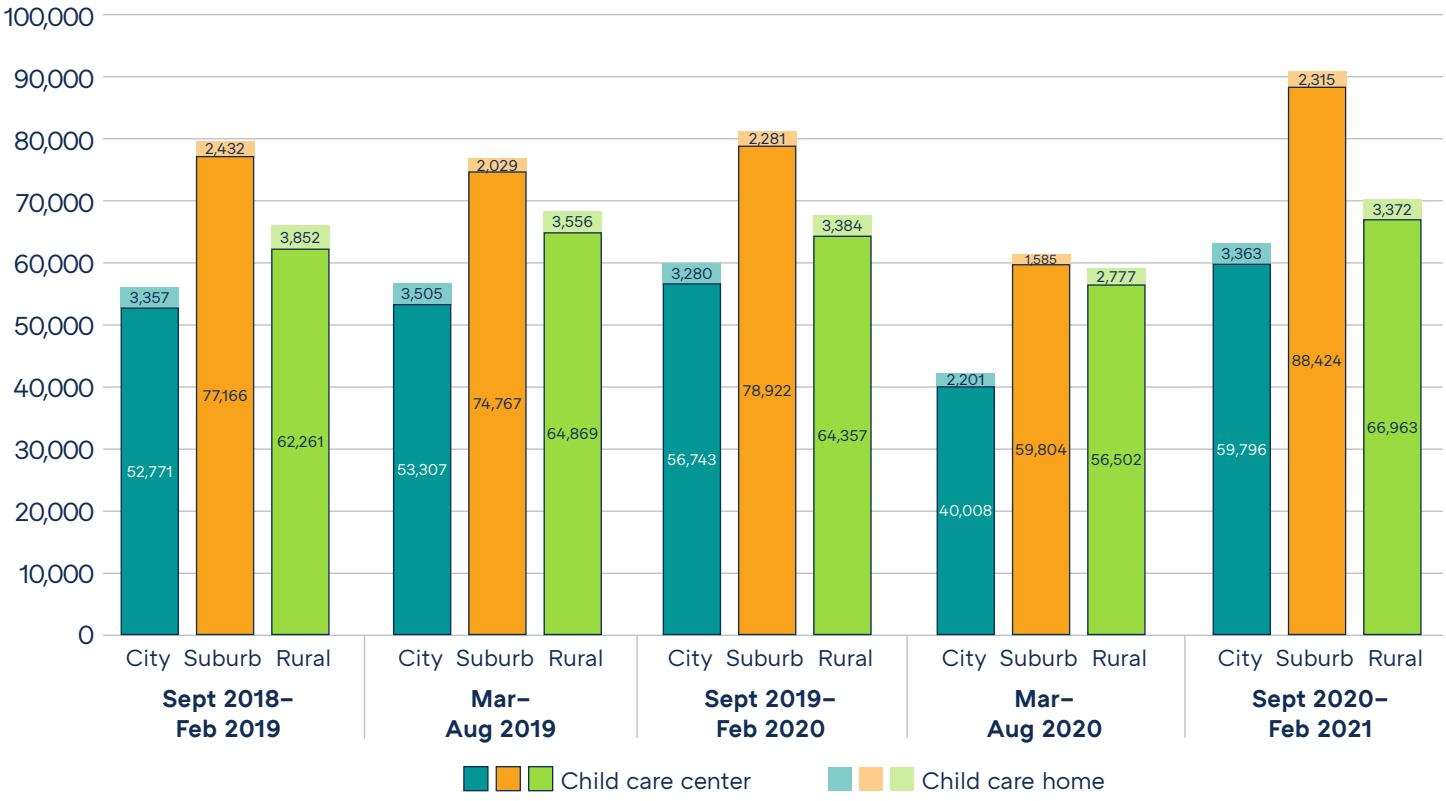
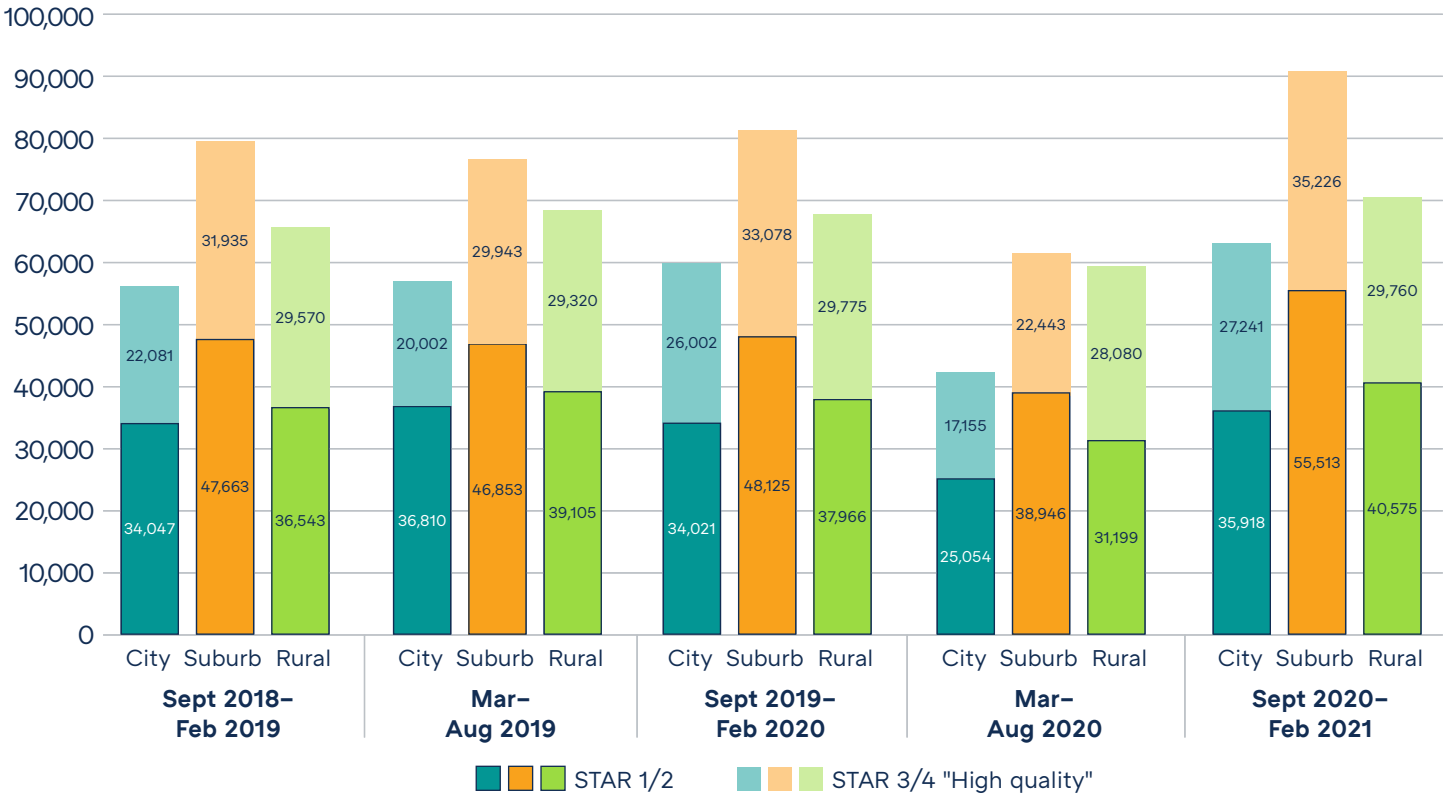


FIGURE 6d. Estimated capacity of certificate renewals, by STAR rating and geographic locale, September 2018–February 2021



Trends in Existing Provider Supply by Community Poverty Level

Certificate renewals

Overview. Both before and during the pandemic, far more providers from low-poverty communities applied for certificate renewals than providers from high-poverty communities. Indeed, certificate renewal counts in low-poverty communities more than doubled those in high-poverty communities. Child care homes' shares of certificate renewals were much larger in low- versus high-poverty communities. For example, in Sept 2019-Feb 2020, 47.6% of all certificate renewals in high-poverty communities came from child care homes, while only 24.1% did in low-poverty communities (Figure 7a and Table A-7a). Low-poverty communities had relatively more certificate renewals submitted by STAR 3/4 providers compared to high-poverty communities. For example, in Sept 2020-Feb 2021, 19.8% of all certificate renewals in high-poverty communities were submitted by STAR 3/4 providers, compared to 26.4% in low-poverty communities (Figure 7b and Table A-7a).

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, certificate renewal counts for high-poverty communities declined from 556 to 403 (-27.5%). In low-poverty communities, renewal counts dropped from 1,294 to 992 (-23.3%).[35]

Relative declines in certificate renewals among child centers were nearly equal between high-poverty (-23.0%) and low-poverty communities (-22.5%) from Mar-Aug 2019 to Mar-Aug 2020. However, among child care homes, rates of decline were greater in high-poverty communities. Over spring/summer time periods, renewal counts for child care homes in high-poverty communities fell from 265 to 179 (-32.5%), while in low-poverty communities counts decreased from 308 to 228 (-26.0%).

Among STAR 1/2 providers, renewal counts decreased at a greater rate in high-poverty communities (-31.6%) compared to low-poverty communities (-23.8%). Among STAR 3/4 providers, that trend flipped. From Mar-Aug 2019 to Mar-Aug 2020, certificate renewal counts for STAR 3/4 providers declined by 9.6% in high-poverty communities, and by 22.0% in low-poverty communities.

Fall/Winter Trends. In high-poverty communities, certificate renewal counts in Sept 2020-Feb 2021 (n=592) were slightly lower than in both pre-pandemic fall/winter time periods. In contrast, in low-poverty communities, the Sept 2020-Feb 2021 renewal count (n=1,396) was higher than any prior time period examined in this study.

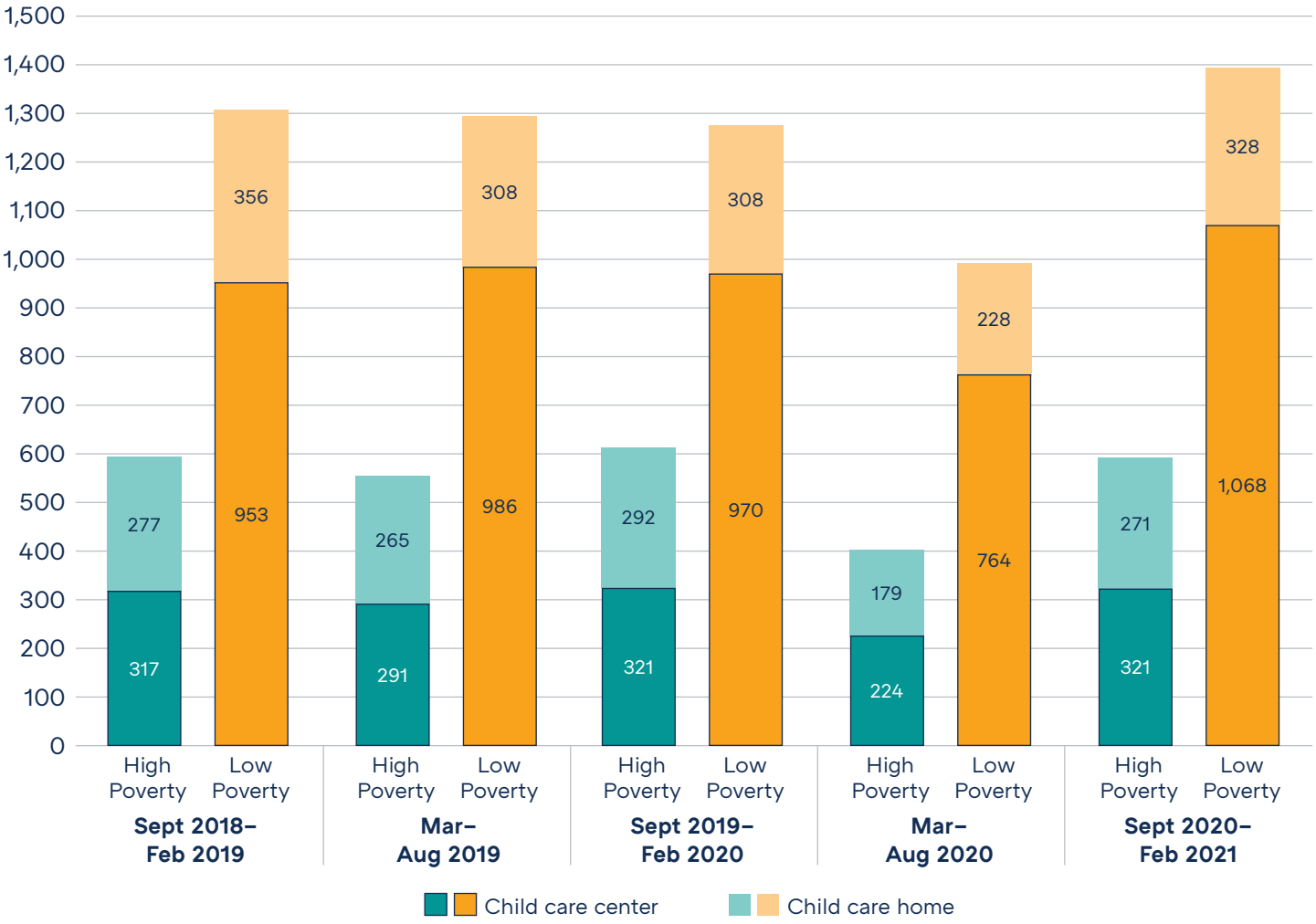
In high-poverty communities, renewal counts for child care centers were the same in Sept 2019-Feb 2020 and Sept 2020-Feb 2021, while counts for child care homes were lower in Sept 2020-Feb 2021 than in either pre-pandemic fall/winter time period (e.g., a 7.2% decline from Sept 2019-Feb 2020). In low-poverty communities, renewal counts for child care centers were higher in Sept 2020-Feb 2021 than in any prior time period, including a 10.1% increase over Sept 2019-Feb 2020. The child care home renewal count in low-poverty communities in Sept 2020-Feb 2021 (n=328) was higher than in Sept 2019-Feb 2020 (n=308) but lower than in Sept 2018-Feb 2019 (n=356).

In high-poverty communities, certificate renewal counts for STAR 1/2 providers were just slightly lower in Sept 2020-Feb 201 compared to prior fall/winter time periods. The number of STAR 3/4 providers that submitted certificate renewals in Sept 2020-Feb 2021 in high-poverty communities was 14.6% lower

35 We also examined trends in certificate renewals for communities with middle high and middle low levels of poverty. Those counts can be found in Table X.

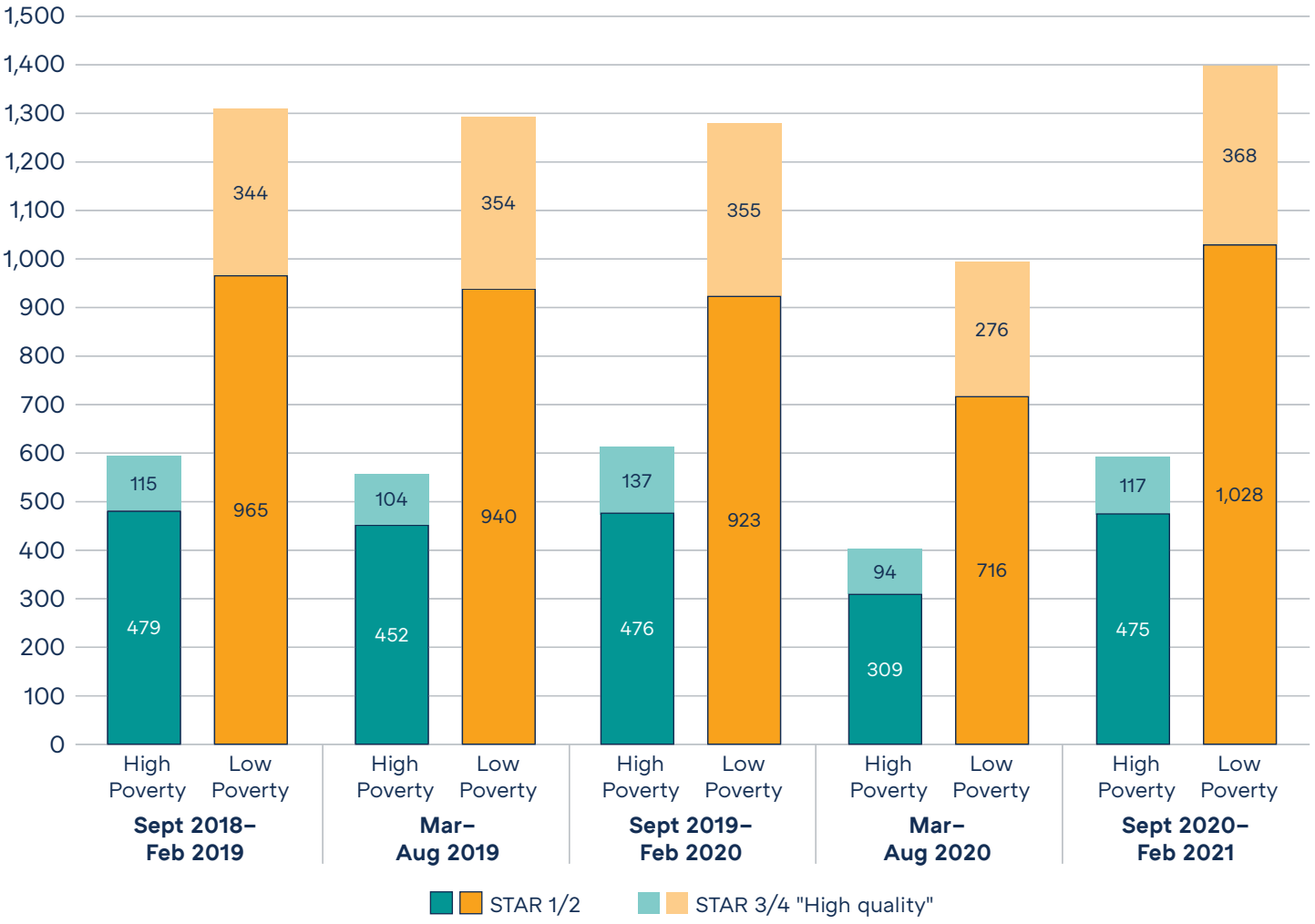
compared to Sept 2019-Feb 2020. In low-poverty communities, renewal counts for both STAR 1/2 and STAR 3/4 providers were higher in Sept 2020-Feb 2021 than in either pre-pandemic fall/winter time period. From Sept 2019-Feb 2020 to Sept 2020-Feb 2021, renewal counts increased by 11.4% for STAR 1/2 providers and by 3.7% for STAR 3/4 providers in low-poverty communities.

FIGURE 7a. Number of certificate renewals, by provider type and community poverty level, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4%+.

FIGURE 7b. Number of certificate renewals, by STAR rating and community poverty level, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4%+.

Existing Capacity

Overview. Low-poverty communities had far greater existing capacity counts than high-poverty communities, a trend that persisted during both pre-pandemic and pandemic time periods. Indeed, existing capacity in low-poverty communities was around four times that of high-poverty communities. Child care centers provided the vast majority of existing capacity across communities, though child care homes comprised a greater proportion of capacity in high-poverty communities compared to low-poverty communities (e.g., 7.9% vs. 2.2% in Sept 2019-Feb 2020; see Figure 7c and Table A-7b). In most cases, providers with STAR 3/4 ratings represented a greater share of total existing capacity in high-poverty communities compared to low-poverty communities (e.g., 47.1% vs. 43.0% in Sept 2019-Feb 2020, and 45.1% vs. 40.3% in Mar-Aug 2020; see Table 7d and Table A-7b).

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, existing capacity counts in high-poverty communities decreased from 25,855 to 20,718 (-19.9%). In low-poverty communities, existing capacity declined at a similar rate, from 99,401 to 80,546 (-19.0%).

In both high- and low-poverty communities, rates of decline in existing capacity were greater for child care homes than child care centers. In high-poverty communities, existing capacity counts dropped by 19.0% among child care centers and by 30.4% among child care homes. In low-poverty communities, child care centers' existing capacity decreased by 18.7% from Mar-Aug 2019 to Mar-Aug 2020, while among homes it decreased by 27.8%.

In both high- and low-poverty communities, rates of decline in existing capacity were greater for child care homes than child care centers.

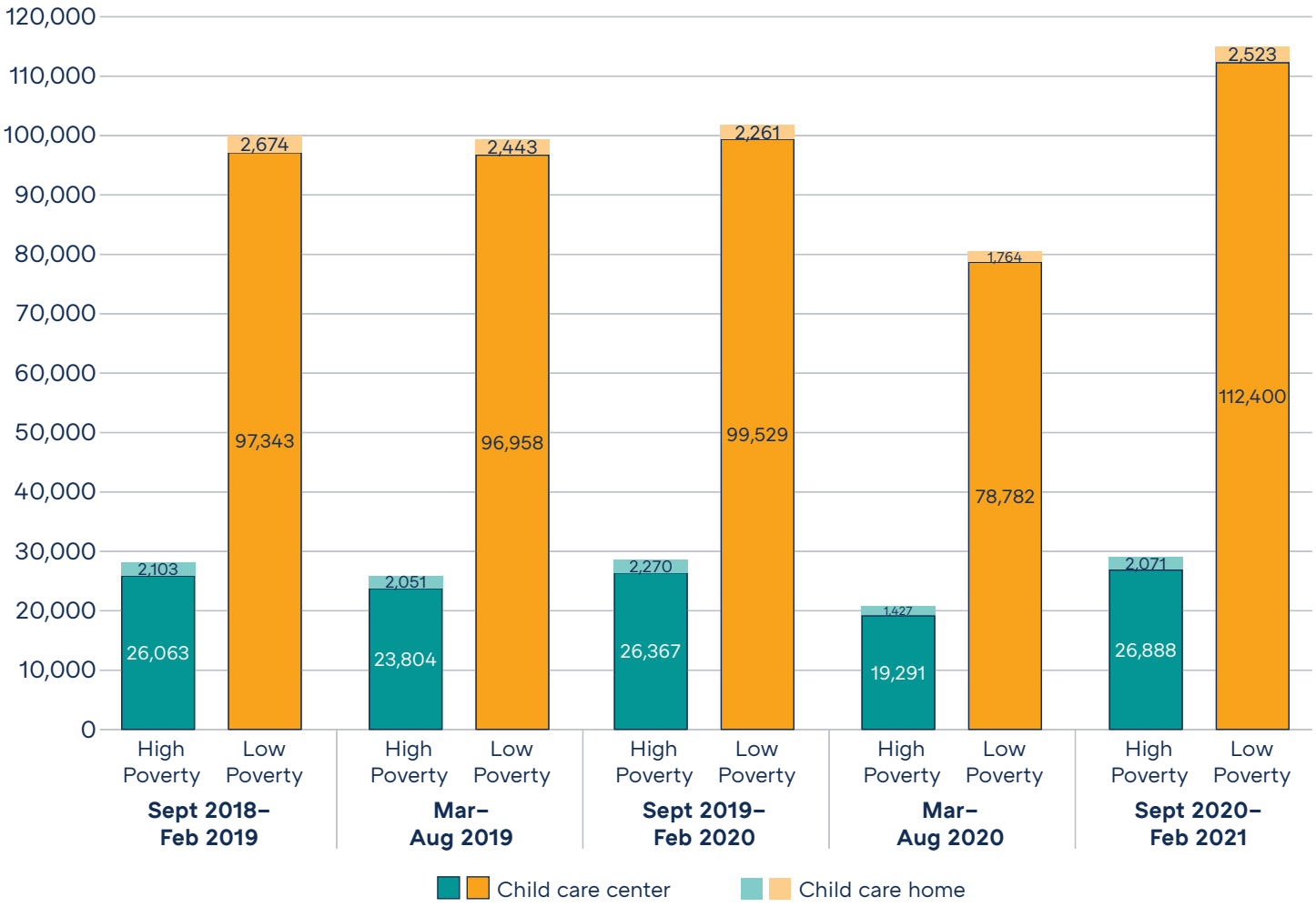
Relative declines in existing capacity among STAR 1/2 providers were greater in high-poverty communities. Among STAR 3/4 providers, the decrease was greater in low-poverty communities. In high-poverty communities, existing capacity among STAR 3/4 providers dropped from 9,737 in Mar-Aug 2019 to 9,336 in Mar-Aug 2020 (-4.1%). In low-poverty communities, STAR 3/4 provider capacity decreased from 40,813 to 32,438 (-20.5%).

Fall/Winter Trends. In high-poverty communities, existing capacity was 28,959 in Sept 2020-Feb 2021. That count was a 1.1% increase over Sept 2019-Feb 2020, and was greater than the capacity count in Sept 2018-Feb 2019 by around 800 enrollment slots. In low-poverty communities, existing capacity was 114,923 in Sept 2020-Feb 2021, an increase of 12.9% over the prior fall/winter time period, and over 14,000 enrollment slots more than Sept 2018-Feb 2019.

In high-poverty communities, existing capacity counts for child care centers were slightly greater in Sept 2020-Feb 2021 than in pre-pandemic time periods. In contrast, existing capacity among child cares was lower in Sept 2020-Feb 2021 than it was in both pre-pandemic time periods. In low-poverty communities, existing child care center capacity was substantially higher in Sept 2020-Feb 2021 than in prior fall/winter time periods, offsetting the decrease in existing capacity that occurred in Mar-Aug 2020. Existing capacity within child care homes in low-poverty communities was higher in Sept 2020-Feb 2021 than in the prior fall/winter time period, but lower compared to Sept 2018-Feb 2019.

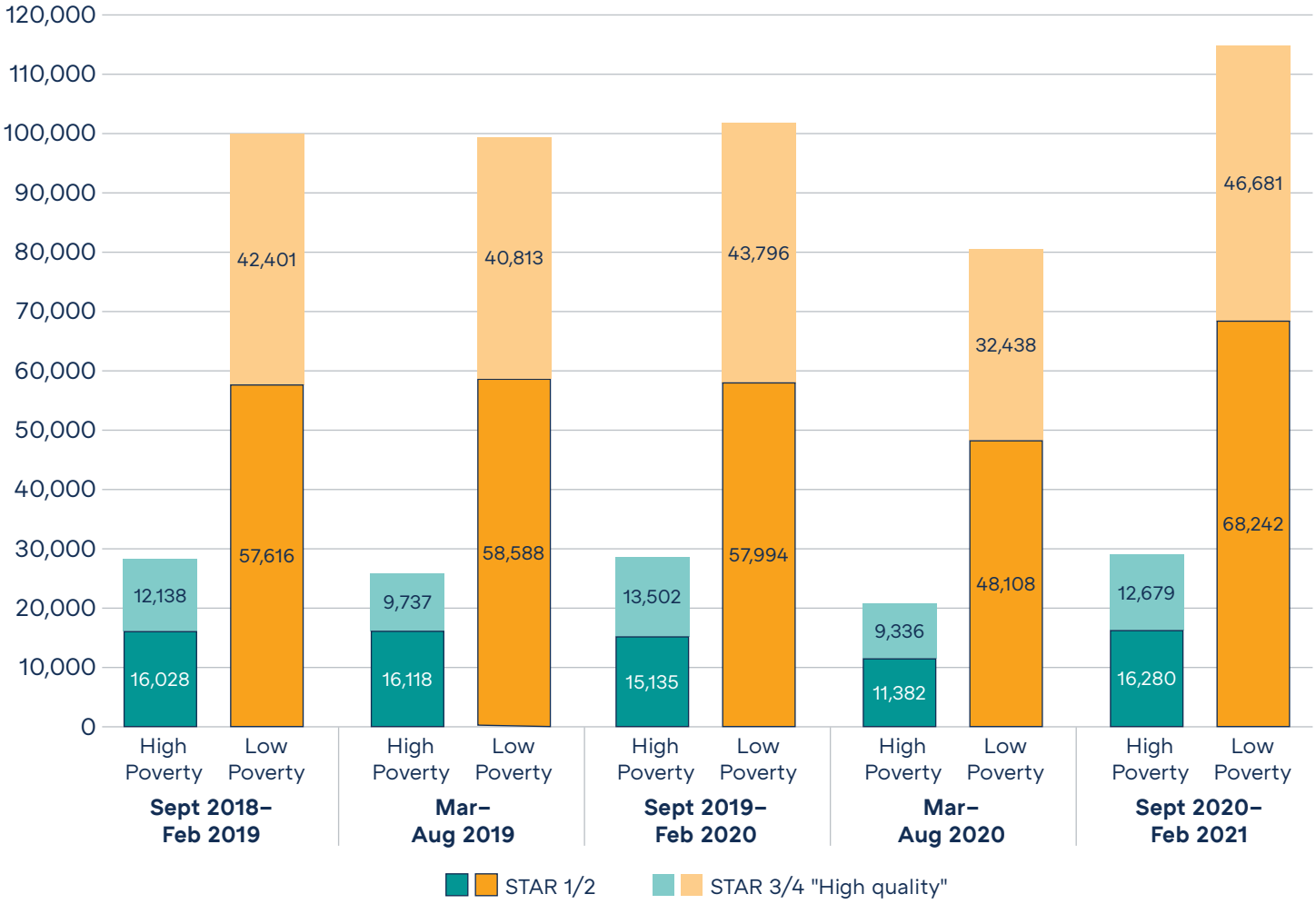
In high-poverty communities, existing capacity counts among STAR 1/2 providers rebounded in Sept 2020-Feb 2021 (e.g., a 7.6% increase compared to Sept 2019-Feb 2020). However, existing capacity counts for STAR 3/4 providers continued to decline, as the Sept 2020-Feb 2021 count was 6.1% lower compared to Sept 2019-Feb 2020. In contrast, in low-poverty communities, existing capacity counts in Sept 2020-Feb 2021 were higher for both STAR 1/2 and STAR 3/4 providers compared to all pre-pandemic fall/winter time periods.

FIGURE 7c. Estimated capacity of certificate renewals, by provider type and community poverty level, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4%+.

FIGURE 7d. Estimated capacity of certificate renewals, by STAR rating and community poverty level, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4%+.

Trends in Existing Provider Supply by Community Racial Composition

Certificate renewals

Overview. Certificate renewal counts were far greater in predominantly White communities (i.e., communities with the highest percentages of White residents) compared to communities of color (i.e., communities with the lowest percentages of White residents) both before and during the pandemic.[36] Child care homes made up a greater share of certificate renewals in communities of color than in predominantly White communities (e.g., 42.5% vs. 33.2% in Sept 2019-Feb 2020, and 42.9% vs. 32.7% in Mar-Aug 2020; see Figure 8a and Table A-8a). STAR 3/4 providers represented a greater share of certificate renewals in predominantly White communities compared to communities of color (e.g., 27.5% vs. 17.7% in Sept 2019-Feb 2020, and 27.7% vs. 18.3% in Mar-Aug 2020; see Figure A-8b and Table A-8a).

36 We also examined trends in existing capacity in communities with middle high and middle low percentages of White residents. Those counts are in the appendix in Table A-6a and Table A-6b.

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, certificate renewal counts declined at a greater rate in communities of color than in predominantly White communities. In predominantly White communities, certificate renewal counts decreased from 1,132 to 899 (-20.6%), while in communities of color, they dropped from 700 to 438 (-37.4%).

Over spring/summer time periods, communities of color experienced greater relative declines in renewal counts for both child care centers and child care homes, compared to predominantly White communities. In communities of color, renewal counts for centers declined by 34.9%, and among child care homes the decline was 40.5%. By comparison, in predominantly White communities, renewals decreased by 20.1% and 21.6% for centers and homes, respectively.

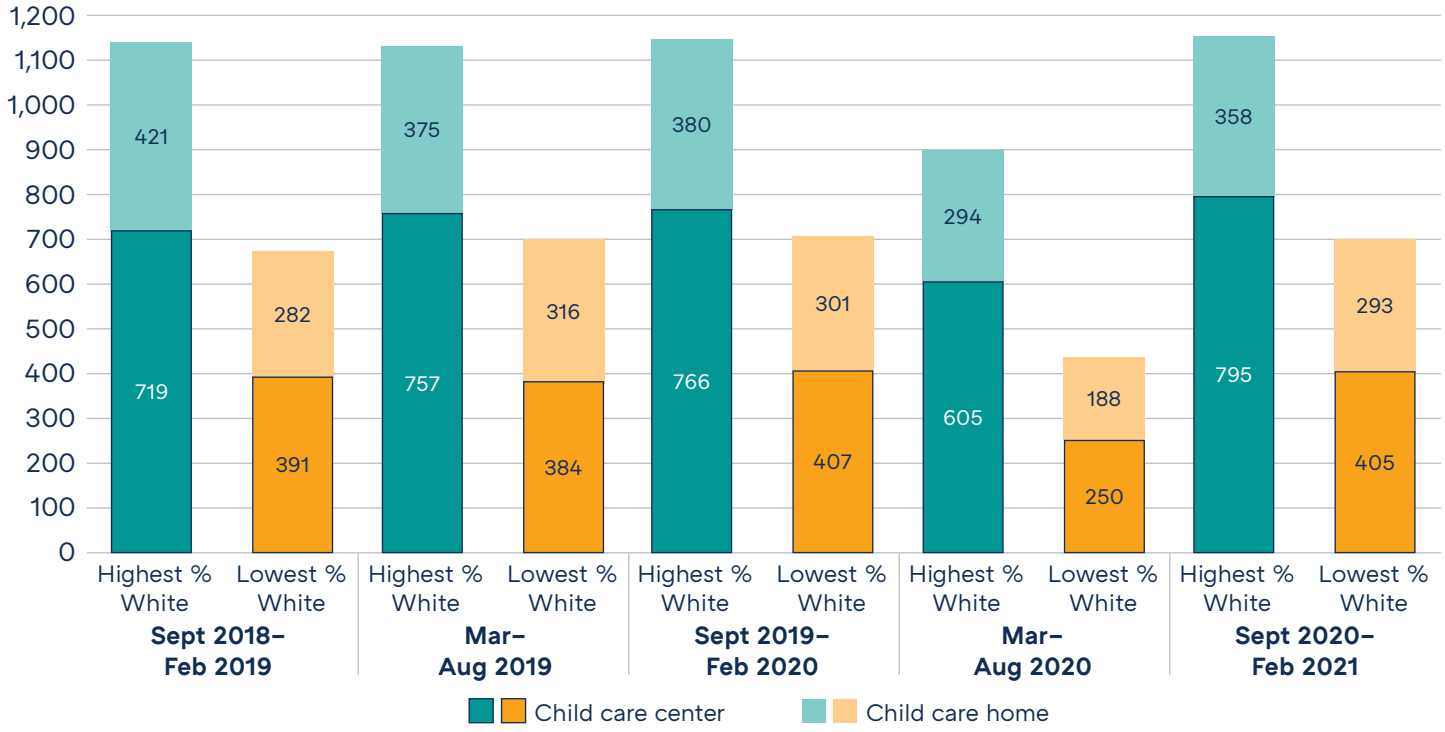
From Mar-Aug 2019 to Mar-Aug 2020, renewal counts declined at greater rates in communities of color among both STAR 1/2 and STAR 3/4 providers. In communities of color, renewals decreased among STAR 1/2 providers by 40.5%, and among STAR 3/4 providers by 18.4%. In predominantly White communities, declines among STAR 1/2 and STAR 3/4 providers were 23.4% and 12.0%, respectively.

Fall/Winter Trends. In predominantly White communities, there were 1,153 certificate renewals in Sept 2020-Feb 2021, a count that was slightly greater than the two pre-pandemic fall/winter time periods (i.e., 1,140 and 1,146). In communities of color, the number of certificate renewals in Sept 2020-Feb 2021 (698) was slightly lower than in Sept 2019-Feb 2020 (708) yet greater than in Sept 2018-Feb 2019 (673).

In predominantly White communities, certificate renewal counts for child care centers were higher in Sept 2019-Feb 2021 than in either pre-pandemic fall/winter time period, while counts for child care homes were lower. In communities of color, certificate renewal counts for both centers and homes were consistent across all fall/winter time periods (there were 405 certificate renewals for child care centers in Sept 2020-Feb 2021, compared to 407 in Sept 2019-Feb 2020 and 391 in Sept 2018-Feb 2019). Among child care homes in communities of color, certificate renewal counts in Sept 2020-Feb 2021 were slightly lower compared to Sept 2019-Feb 2020 but slightly higher than in Sept 2018-Feb 2019.

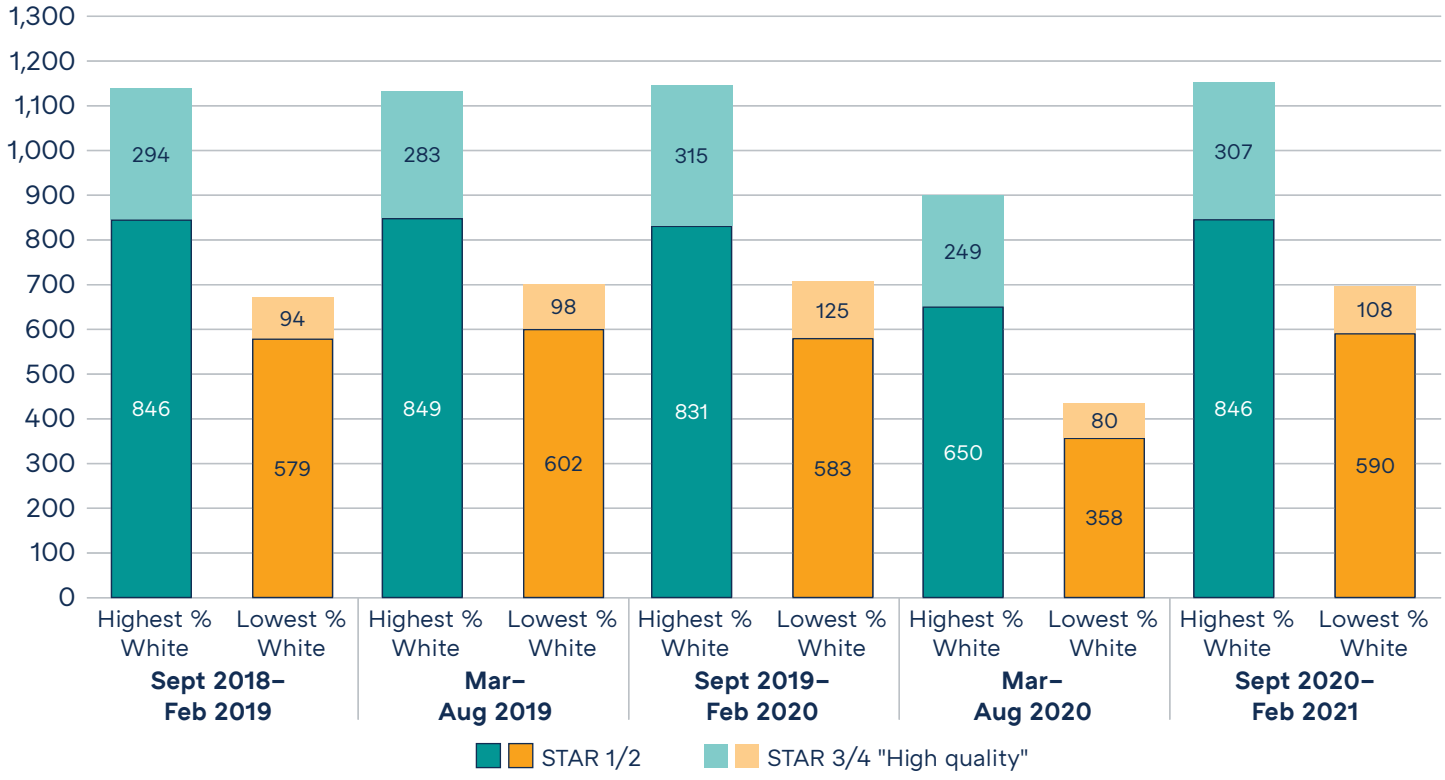
In both predominantly White communities and communities of color, certificate renewal counts for STAR 1/2 providers in Sept 2020-Feb 2021 were slightly greater than or equal to prior fall/winter time periods. And in both community types, renewal counts for STAR 3/4 providers in Sept 2020-Feb 2021 were lower than the prior fall/winter time period but greater than in Sept 2018-Feb 2019. Though, the magnitude of declines varied. That is, from Sept 2019-Feb 2020 to Sept 2020-Feb 2021, certificate renewal counts for STAR 3/4 providers declined by 13.6% in communities of color, but by just 2.5% in predominantly White communities. However, sample sizes were low (i.e., 307 in predominantly White communities and 108 in communities of color).

FIGURE 8a. Number of certificate renewals, by community racial composition and provider type, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

FIGURE 8b. Number of certificate renewals, by community racial composition and STAR rating, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

Existing Capacity

Overview. Existing capacity counts in predominantly White communities were more than double those in communities of color both before and during the pandemic. Child care homes provided a greater proportion of existing capacity in communities of color compared to predominantly White communities (e.g., 7.5% vs. 4.1% in Sept 2019-Feb 2020, and 7.9% vs. 4.0% in Mar-Aug 2020; see Figure 8c and Table A-8b). STAR 3/4 providers accounted for greater shares of existing capacity in predominantly White communities than in communities of color (e.g., 45.5% vs. 35.8% in Sept 2019-Feb 2020, and 35.8% vs. 28.3% in Mar-Aug 2020; see Figure 8d and Table A-8b).

Spring/Summer Trends. From Mar-Aug 2019 to Mar-Aug 2020, the relative decline in existing capacity was greater in communities of color (-35.4%) compared to predominantly White communities (-15.9%). In Mar-Aug 2020, predominantly White communities had over 40,000 more potential enrollment slots than did communities of color (i.e., 59,253 vs. 19,139).[37]

Existing capacity counts in predominantly White communities were more than double those in communities of color both before and during the pandemic.

For both child care centers and child care homes, existing capacity decreased at greater rates in communities of color compared to predominantly White communities. In both types of communities, declines were slightly greater for child care homes than child care centers. In communities of color, existing capacity dropped by 35.1% and 38.5% for centers and homes, respectively. By comparison, in predominantly White communities, existing capacity among child care centers declined by 15.7% from Mar-Aug 2019 to Mar-Aug 2020, while among child care homes it declined by 20.8%.

Relative declines in existing capacity among both STAR 1/2 providers and STAR 3/4 providers were greater in communities of color than in predominantly White communities. In both community types, rates of decline were greater among STAR 1/2 providers. In communities of color, existing capacity declined by 37.7% and 28.6% for STAR 1/2 and STAR 3/4 providers, respectively. In predominantly White communities, existing capacity decreased by 19.2% among STAR 1/2 providers and by 10.9% among STAR 3/4 providers.

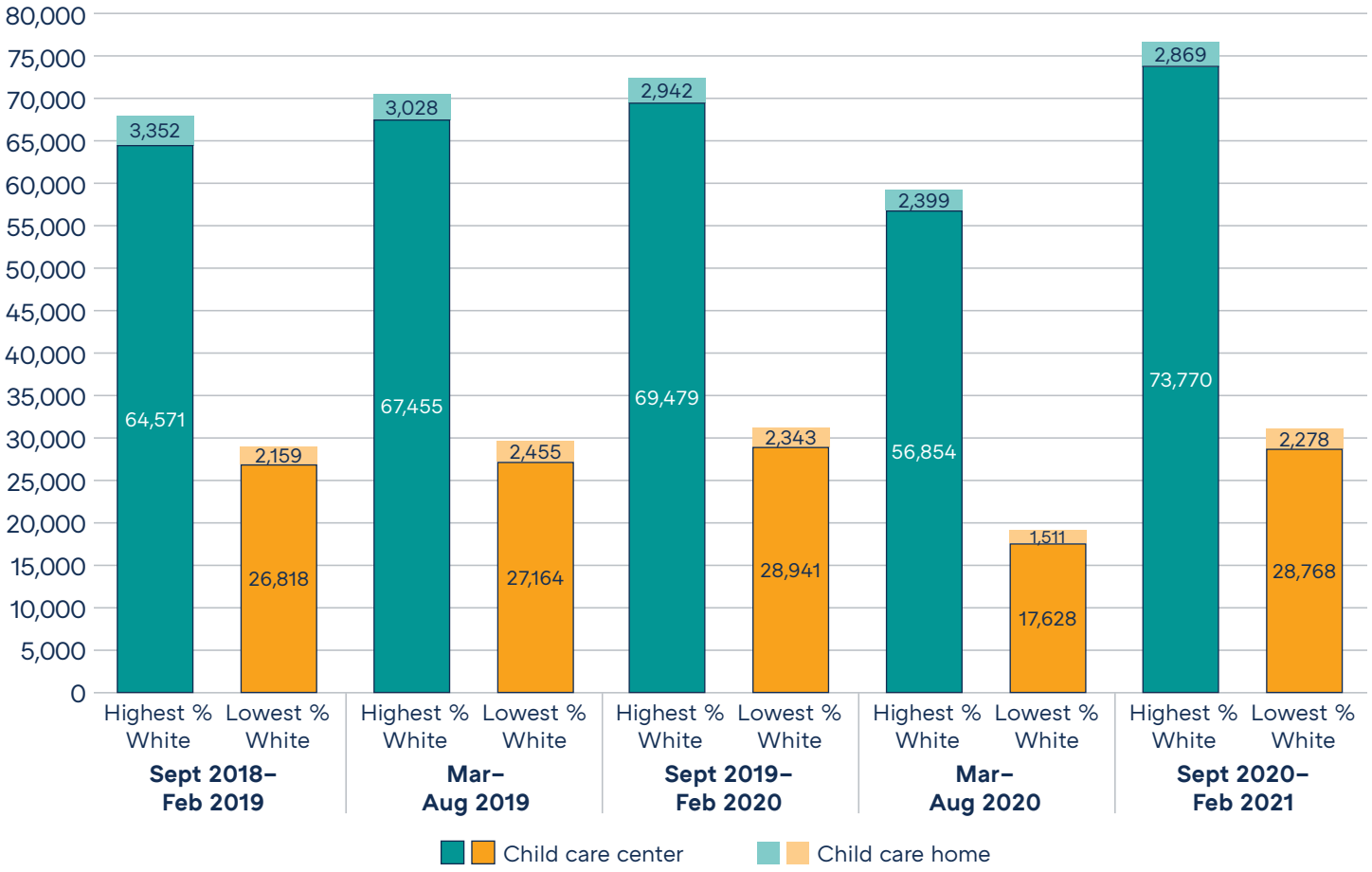
Fall/Winter Trends. In Sept 2020-Feb 2021, existing capacity was 76,639 in predominantly White communities, a 5.8% increase over Sept 2019-Feb 2020, and a 12.8% increase over Sept 2018-Feb 2019. By comparison, existing capacity was 31,046 in communities of color in Sept 2020-Feb 2021, a lower count than in Sept 2019-Feb 2020, and a 7.1% increase over Sept 2018-Feb 2019.

In predominantly White communities, existing capacity among child care centers was greater in Sept 2020-Feb 2021 than in either pre-pandemic fall/winter time period. The existing capacity count among child care homes, however, was lower in Sept 2020-Feb 2021 than in either prior fall/winter time period. In communities of color, existing capacity counts for both child care centers and child care homes were lower in Sept 2020-Feb 2021 than in Sept 2019-Feb 2020, but higher compared to Sept 2018-Feb 2019.

37 We reiterate that estimated capacity counts are based on the number of children providers are legally permitted to enroll, based on the square footage of their facilities and the ages of children they serve, and not actual enrollments.

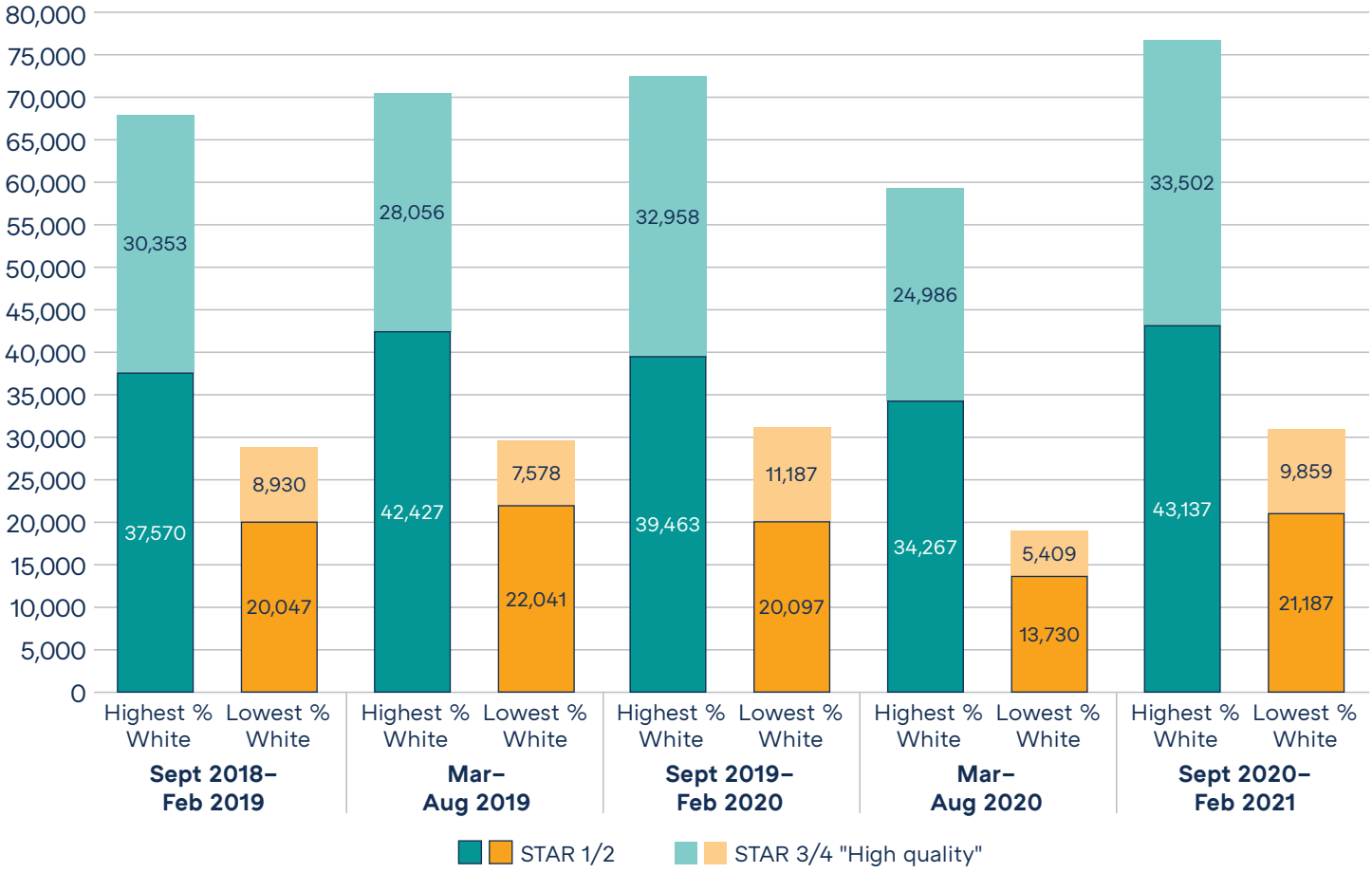
Existing capacity counts for both STAR 1/2 and STAR 3/4 providers were higher in Sept 2020-Feb 2021 than in pre-pandemic fall/winter time periods in predominantly White communities. The relative increase in existing capacity among STAR 3/4 providers from Sept 2019-Feb 2020 to Sept 2020-Feb 2021 was 1.7%. In contrast, in communities of color, existing capacity among STAR 3/4 providers decreased by 11.9% over that time period. Existing capacity among STAR 1/2 providers did rebound in communities of color to 21,187 in Sept 2020-Feb 2021, a 5.4% increase over the prior fall/winter time period.

FIGURE 8c. Estimated capacity of certificate renewals, by community racial composition and provider type, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

FIGURE 8d. Estimated capacity of certificate renewals, by community racial composition and STAR rating, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

Summary of Trends in Existing Provider Supply

Certificate renewal counts and existing capacity counts declined in Mar-Aug 2020, but rebounded in Sept 2020-Feb 2021 to levels that were similar to — or even greater than — pre-pandemic time periods. However, the magnitude of changes in renewal and existing capacity counts varied by community characteristics. From Mar-Aug 2019 to Mar-Aug 2020, relative declines in existing provider supply were greatest in cities and communities of color, and smallest in rural communities and predominantly White communities.[38] These trends generally persisted regardless of provider type and STAR rating. In Sept 2020-Feb 2021, increases in renewal counts and existing capacity estimates were higher among providers in suburban and low-poverty communities compared to providers in other communities. In contrast, both certificate renewal and existing capacity counts were lower in Sept 2020-Feb 2021 than in Sept 2019-Feb 2020 for providers in communities of color. High-poverty communities and rural communities also experienced relatively small increases, and in some cases even decreases, in existing provider supply in Sept 2020-Feb 2021. More research is needed to determine whether these trends persisted across the second and third years of the pandemic — or new trends emerged — or whether existing provider supply stabilized across communities as families and providers continued to adjust to ongoing pandemic conditions.

Like with new provider supply, notable differences in existing provider supply were present even before the pandemic. Suburban communities, low-poverty communities, and predominantly White communities had much higher existing capacity counts than cities, high-poverty communities, and communities of color. In most cases, the communities with the lowest existing capacity counts also experienced relatively greater declines in existing capacity during the pandemic. This finding suggests that providers in cities, high-poverty communities, and communities of color not only need resources to aid pandemic recovery, but may also need additional resources to help address long-term gaps in child care capacity in these communities.

In nearly all communities, child care homes experienced greater relative declines in existing capacity in Mar-Aug 2020, as well as less growth — or even continued decline — in Sept 2020-Feb 2021. This finding may be part of a broader trend of decline among child care homes that began long before the onset of the pandemic. More research may be needed to understand the unique barriers child care homes experience in sustaining operation, especially in communities where child care homes make up a disproportionate share of child care capacity (i.e., urban and rural communities, high-poverty communities, and communities of color).

38 Communities of color are communities with the lowest percentages of White residents (i.e., 0-34.1% of residents are White). Predominantly White communities are communities with the highest percentages of White residents (i.e., 89.1% or more of residents are White). In Pennsylvania, residents of color tend to be concentrated in cities, while most rural areas have high percentages of White residents. Given these overlapping demographic characteristics, the trends noted here likely reflect similar populations of providers.

Findings for Lost Provider Supply

We measure lost provider supply in terms of the number of child care providers that permanently closed, as well as the estimated capacity that would have resulted from those providers staying in operation.[39] The month in which providers closed is based on when they were reported closed in PELICAN, the provider self-service online platform used by the state of Pennsylvania. These reported closure dates may not necessarily reflect the exact time that the provider stopped operating. While most providers closed temporarily during at least some point of the pandemic — including some for extended periods of time[40] — our sample of closed providers includes only those that closed permanently in March 2020-February 2021.

In our analysis of lost provider supply, we present closure and capacity counts within stacked bar graphs that also include counts for new and existing providers. This approach better illustrates the impact of permanent provider closures by placing them within the context of overall child care supply (e.g., communities with greater numbers of operating providers may also have greater numbers of provider closures). In many of our figures, counts of permanently closed providers and their capacities are presented as negative numbers, indicating the subtraction, or loss, of these counts from overall provider supply.

Beyond raw counts, we also measure lost provider supply in terms of the proportion of potential provider supply that was lost as a result of providers' closures (e.g., in Mar-Aug 2019, 6.6% of potential provider capacity was lost because of permanent provider closures). We do this by adding counts for new, existing, and permanently closed providers, and dividing the number of closures by that sum. When calculating lost supply by STAR rating, we only include existing provider and lost provider counts, as the vast majority of new providers in our sample had not yet received a STAR designation.

In our interpretation of lost provider supply findings, we consider the potential effect of pandemic-related factors on providers' ability to sustain business. Loss of revenue from reduced enrollment and attendance, higher expenditures associated with safety mitigation measures (e.g., cleaning supplies, PPE), staffing shortages, and health concerns, among other factors, made operating child care facilities increasingly challenging during the pandemic. While state agencies supported providers with many of these challenges (see p. 7-8), research conducted in Pennsylvania during spring 2020 indicates many providers feared being forced into permanent closure as a result of the economic and social stresses of the pandemic.[41] Accordingly, we hypothesized that the data would show a relative increase in permanent provider closures and reduction in capacity during the pandemic time periods.

39 Licensed capacity is defined as the maximum number of children permitted to receive care in a child care facility at one time, based on the square footage of the child care space and the age of the children served. Providers' licensed capacities do not necessarily match the actual number of children they choose to enroll. Accordingly, we consider our capacity counts to be estimates of the potential number of children providers could enroll, if they operated at maximum licensed capacity.

40 It is possible that providers that reported being temporarily closed throughout the first year of the pandemic subsequently closed permanently.

41 Sirinides, 2020.

State-Level Trends in Lost Provider Supply

Number and Share of Permanent Closures

Overview. Permanently closed providers represented 7.5-9.3% of all licensed providers in the state during the time periods examined (Figure 9a). For all time periods examined, the number of permanently closed providers was greater than the number of new providers, a concerning trend that suggests the state's pool of child care providers may be gradually shrinking. This trend was driven by closures among child care homes. Permanently closed providers were a significantly larger share of total providers among child care homes, compared to child care centers (e.g., in Sept 2019-Feb 2020, 12.6% of child care homes in our sample closed permanently, versus 5.3% of child care centers). These data suggest child care homes were more likely to close permanently than child care centers both before and during the pandemic (Figure 9b). Among providers with a STAR rating, permanently closed providers were a much larger share of those with STAR 1/2 ratings, compared to STAR 3/4 providers (e.g., in Mar-Aug 2020, 11.9% of all STAR 1/2 providers in our sample permanently closed, versus 4.1% of STAR 3/4 providers). These data suggest permanent closure is more likely among providers with lower STAR ratings (Figure 9c).

Spring/Summer Trends. In Mar-Aug 2020, 9.3% (n=280) of licensed child care providers closed permanently in Pennsylvania.[42] That share was similar to Mar-Aug 2019, when 9.1% (n=369) of child care providers in the state closed permanently (Figure 9a and Table A-9).

In Mar-Aug 2020, 7.4% (n=148) of child care centers closed permanently, a similar proportion as in Mar-Aug 2019 (i.e., 7.7%, n=203). Permanent closures were significantly more prevalent among child care homes in both spring/summer time periods. In Mar-Aug 2020, 13.0% (n=132) of child care homes closed permanently, a slight increase over Mar-Aug 2019 when 11.5% (n=166) did.

In Mar-Aug 2020, 251 providers with STAR 1/2 ratings closed permanently, representing 11.9% of all STAR 1/2 providers in our sample. That share was similar to Mar-Aug 2019, when 11.7% (n=339) of STAR 1/2 providers closed permanently. In contrast, permanently closed providers accounted for a significantly smaller share of all STAR 3/4 providers. In Mar-Aug 2020, 4.1% of STAR 3/4 providers closed (n=29), while in Mar-Aug 2019 that share was 3.7% (n=30).

For all time periods examined, the number of permanently closed providers was greater than the number of new providers, a concerning trend that suggests the state's pool of child care providers may be gradually shrinking.

Fall/Winter Trends. In Sept 2020-Feb 2021, 301 child care providers closed permanently, representing 7.5% of all child care providers in our sample. Both that count and that proportion were slightly lower compared to Sept 2018-Feb 2019 and Sept 2019-Feb 2020, when 8.5% (n=346) and 8.0% (n=318) of providers closed permanently.

In Sept 2020-Feb 2021, 5.8% (n=153) of child care centers closed permanently, a slightly greater share compared to Sept 2019-Feb 2020 (5.3%; n=136) but slightly lower than in Sept 2018-Feb 2019 (6.0%; n=149). By comparison, 10.6% (n=148) of all child care homes in our sample closed permanently during that time period. Permanent closures among child care homes were even more

42 We calculate 9.3% as a proportion of total provider supply, had all permanently closed providers remained in operation. That is, 9.3% is equal to the number of permanently closed providers (280) divided by the sum of all providers (213 new providers, 2,526 existing providers, and 280 closed providers).

prevalent during pre-pandemic fall/winter time periods (i.e., 12.5% with n=197 in Sept 2018-Feb 2019 and 12.6% with n=182 in Sept 2019-Feb 2020). Notably, while there were far fewer child care homes operating in Pennsylvania than child care centers, child care homes had similar — or even greater — numbers of permanent closures during the time periods of this study.

In Sept 2020-Feb 2021, 9.1% (n=267) of all STAR 1/2 providers in our sample closed permanently, a slight decline compared to Sept 2019-Feb 2020 (10.1%; n=291) and Sept 2018-Feb 2019 (10.8%; n=319). Permanent closure counts and shares were significantly lower among STAR 3/4 providers. In Sept 2020-Feb 2021, only 34 STAR 3/4 providers permanently closed, represented just 3.9% of all STAR 3/4 providers. Put another way, while STAR 3/4 providers represented 24.1% of all existing providers in Sept 2020-Feb 2021, they were only 11.3% of permanently closed providers during that time period. Permanent closures were even less frequent among STAR 3/4 providers during the two pre-pandemic fall/winter time periods (i.e., 3.3% and 3.1%).

FIGURE 9a. Number of providers that permanently closed, as a share of total providers, September 2018–February 2021

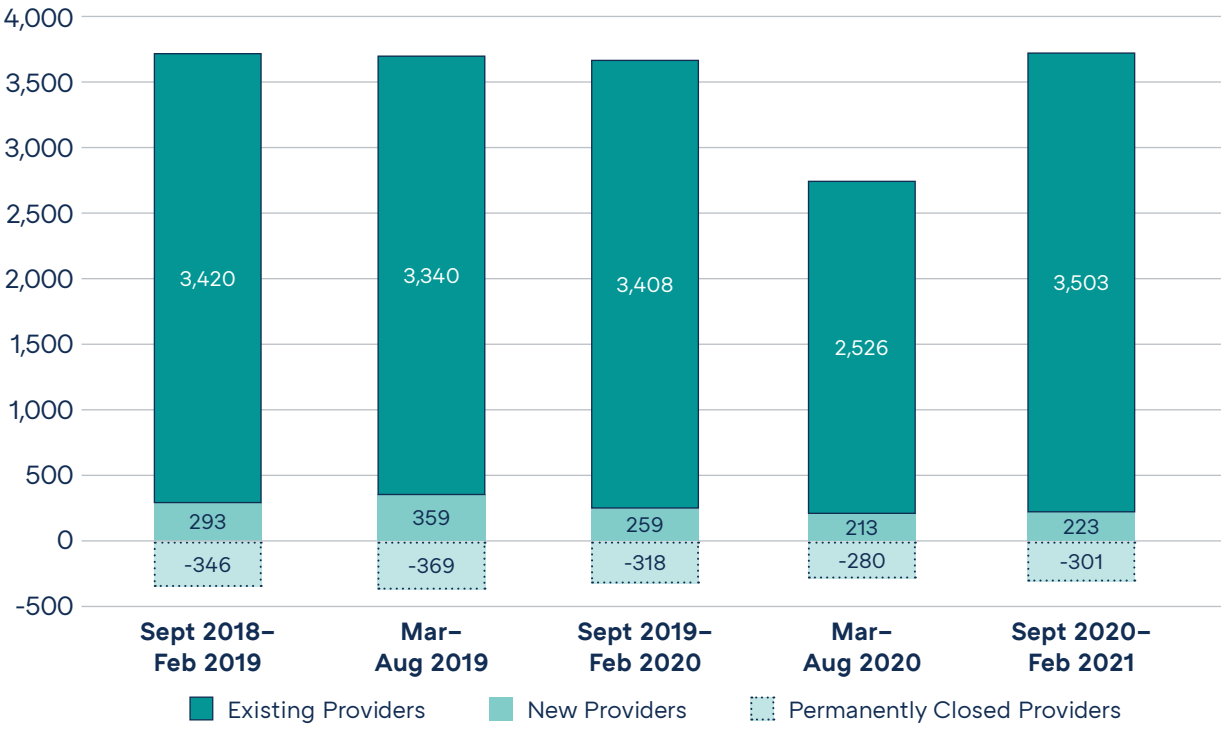


FIGURE 9b. Number of providers that permanently closed as a share of total providers, by provider type, September 2018–February 2021

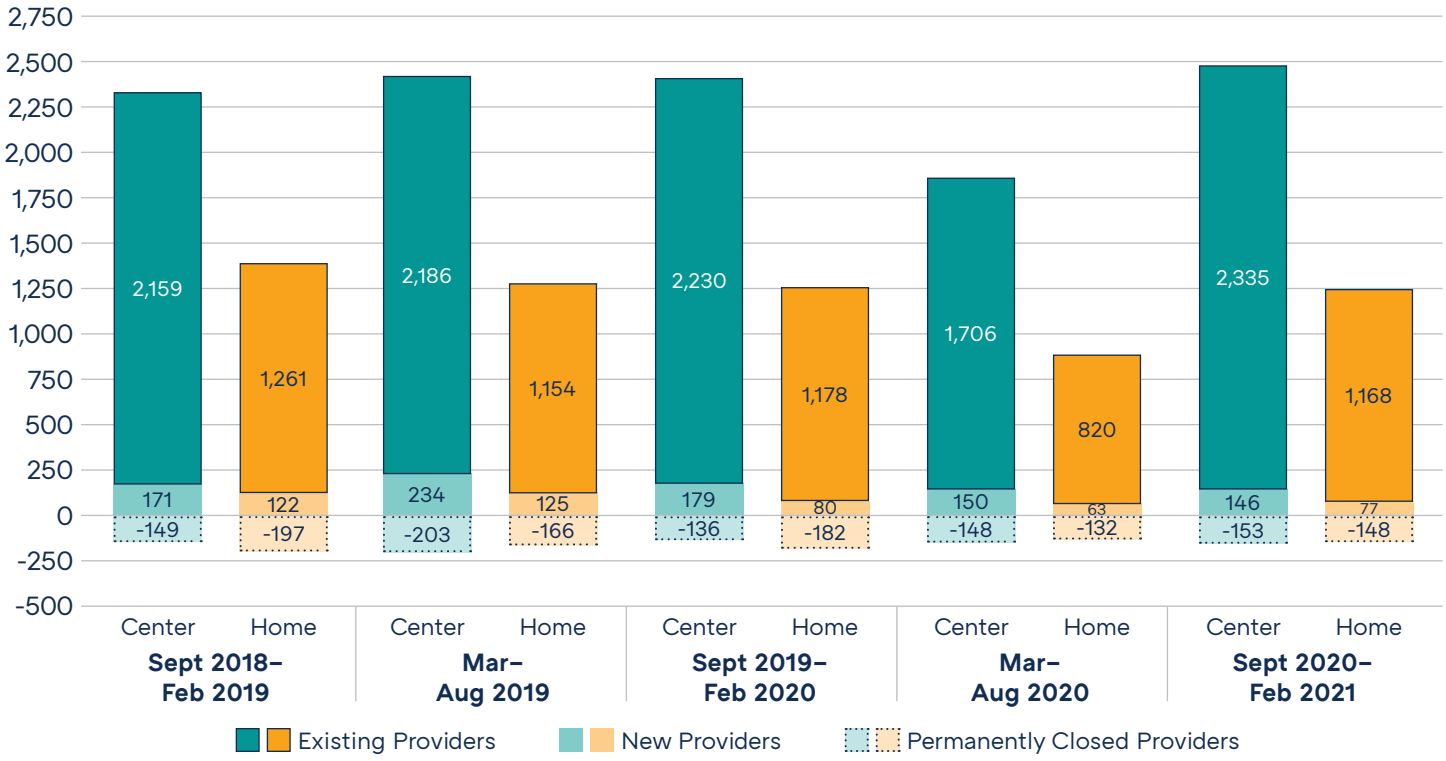
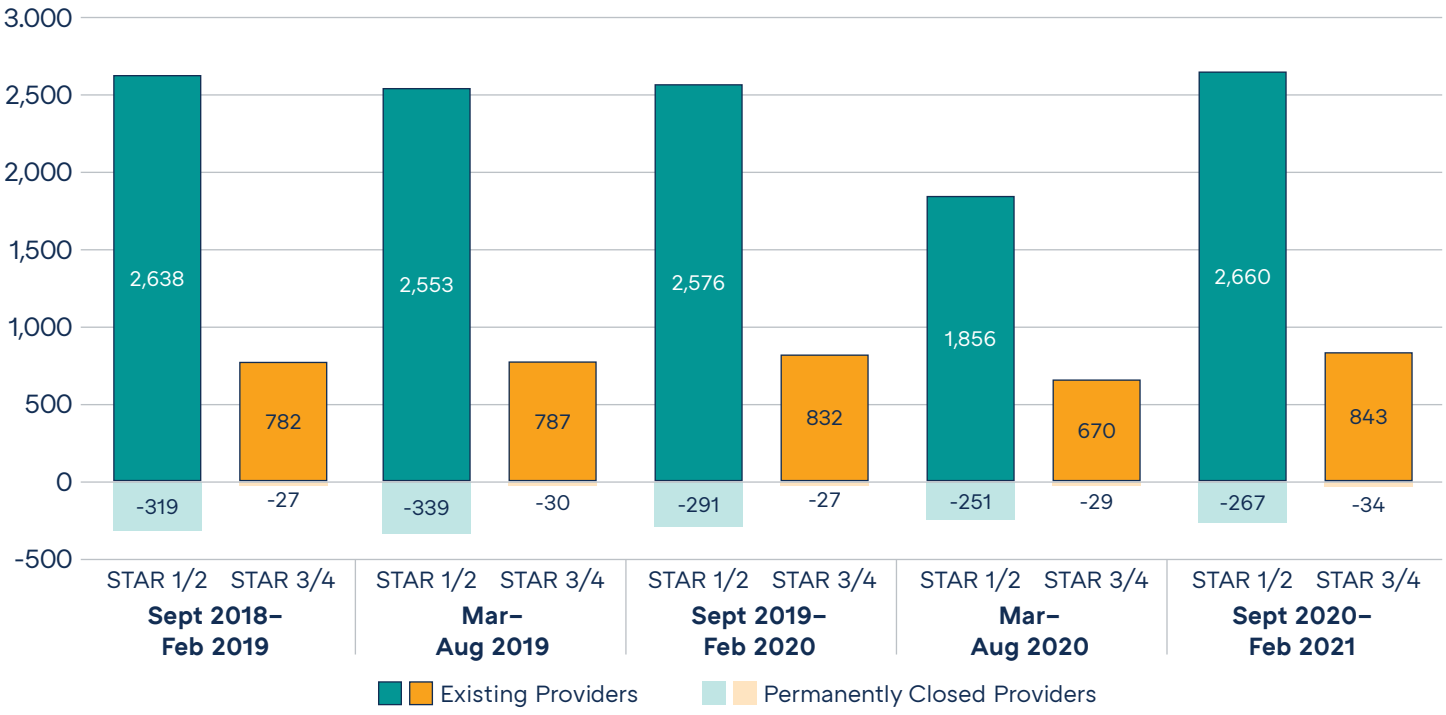


FIGURE 9c. Number of providers that permanently closed as a share of total providers, by STAR rating, September 2018–February 2021



Note: Analysis by STAR rating does not include new providers because, in most cases, new providers had not yet obtained a STAR rating.

Lost Capacity

Overview. During the time periods examined, 4.0-6.6% of potential provider capacity in Pennsylvania was lost as a result of permanent provider closure. In all time periods but one (i.e., Mar-Aug 2020), lost capacity counts were smaller than new capacity counts, suggesting that losses in capacity due to permanent closure were made up for by the opening of new child care facilities (e.g., in Sept 2020-Feb 2021, 11,901 enrollment slots were lost, but 12,606 were gained; see Figure 10a).

Lost capacity counts were far greater among child care centers than child care homes, as child care homes enroll small numbers of children. However, a greater proportion of capacity in child care homes was lost than in child care centers. For example, in Sept 2019-Feb 2020, 12.7% of potential capacity in child care homes was lost due to permanent closures, while in centers that share was just 3.6%. Among child care centers, lost capacity was offset by new capacity in each time period examined (e.g., in Mar-Aug 2019, 14,251 enrollment slots in child care centers were lost due to permanent closures, but 15,558 were gained by the opening of new child care centers; see Figure 10b). The opposite trend occurred among child care homes, with lost capacity counts far exceeding new capacity counts across all time periods examined.

Across all time periods, lost capacity counts among STAR 1/2 providers were much higher compared to STAR 3/4 providers. The relative share of STAR 1/2 providers that closed was also greater (e.g., in Mar-Aug 2019, 9.5% of potential capacity among STAR 1/2 providers was lost due to permanent closure, while 3.2% of potential capacity among STAR 3/4 providers was; see Figure 10c). Moreover, across all time periods examined, STAR 3/4 providers' share of lost capacity was much smaller than their share of existing capacity (e.g., in Sept 2019-Feb 2020, STAR 3/4 providers were 43% of existing capacity, but only 16% of lost capacity). These findings may suggest that child care supply among STAR 3/4 providers is more stable than STAR 1/2 provider supply.[43]

Spring/Summer Trends. In Mar-Aug 2020, an estimated 10,701 enrollment slots were lost due to permanent provider closures, representing 5.8% of all potential child care capacity in the state (Figure 10a and Table A-9). Both that count and that proportion were lower than they were in Mar-Aug 2019 (i.e., 6.6%; n=15,519). This finding was the opposite of what we hypothesized, and may be an indication of the effectiveness of state policies designed to support providers during the early months of the pandemic.

Among both homes and centers, lost capacity counts were lower in Mar-Aug 2020 than in Mar-Aug 2019. During that pandemic onset spring/summer time period, 5.5% (n=9,707) of potential capacity in centers was lost due to permanent closure, compared to 6.4% (n=14,251) in Mar-Aug 2019. In child care homes, 994 enrollment slots were lost due to permanent closure in Mar-Aug 2020, representing 12.3% of all potential home-based capacity. In Mar-Aug 2019, 11.1% (n=1,268) of child care home capacity was lost.

In Mar-Aug 2020, 8.2% (n=8,565) of potential STAR 1/2 provider capacity was lost due to permanent closure. That count and corresponding proportion of potential capacity were smaller compared to Mar-Aug 2019 (i.e., 9.5%; n=12,863). Among STAR 3/4 providers, the lost capacity count was smaller in Mar-Aug 2020 compared to Mar-Aug 2019 (i.e., 2,126 versus 2,656), though shares of lost STAR 3/4 provider capacity were similar (i.e., 3.1% and 3.2%).

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43 STAR 3/4 providers may have greater access to resources that support sustained operation, compared to STAR 1/2 providers. For example, providers with higher quality ratings are more likely to be larger child care centers with greater infrastructure (e.g., larger teaching staff, more administrative support). Providers with higher quality ratings also generally charge higher private tuition rates and are reimbursed at a higher rate for serving children with child care subsidies.

Fall/Winter Trends. In Sept 2020-Feb 2021, 4.8% of potential child care capacity — an estimated 11,901 enrollment slots — was lost due to permanent provider closures. Both that count and that proportion were higher than in either pre-pandemic fall/winter time periods. Though unlike in Mar-Aug 2020, the lost capacity count in Sept 2020-Feb 2021 was smaller than the new capacity count (i.e., 12,606).

Child care centers lost 4.5% (n=10,753) of potential capacity in Sept 2020-Feb 2021 due to permanent closure. Losses in child care center capacity were smaller in both Sept 2019-Feb 2020 (3.6%; n=7,931) and Sept 2018-Feb 2019 (4.3%; n=9,152). Among child care homes, the reverse trend occurred, with a smaller relative loss occurring in Sept 2020-Feb 2021 (10.6%; n=1,148) compared to pre-pandemic fall/winter time periods (12.4% with n=1,502 in Sept 2018-Feb 2019 and 12.7% with n=1,386 in Sept 2019-Feb 2020).

In Sept 2020-Feb 2021, an estimated 2,553 enrollment slots with STAR 3/4 providers were lost due to permanent closure. While that count represented a small percentage of all STAR 3/4 capacity (i.e., 2.7%), it was a higher share than in Sept 2018-Feb 2019 (1.5%) and Sept 2019-Feb 2020 (1.6%). Among STAR 1/2 providers, the share of potential capacity lost to permanent closure was higher in Sept 2020-Feb 2021 (6.6%; n=9,348) than in Sept 2019-Feb 2020 (6.1%; n=7,865), though lower compared to Sept 2018-Feb 2019 (7.4%; n=9,412).

FIGURE 10a. Estimated capacity of providers that permanently closed, as a share of total provider capacity, September 2018–February 2021

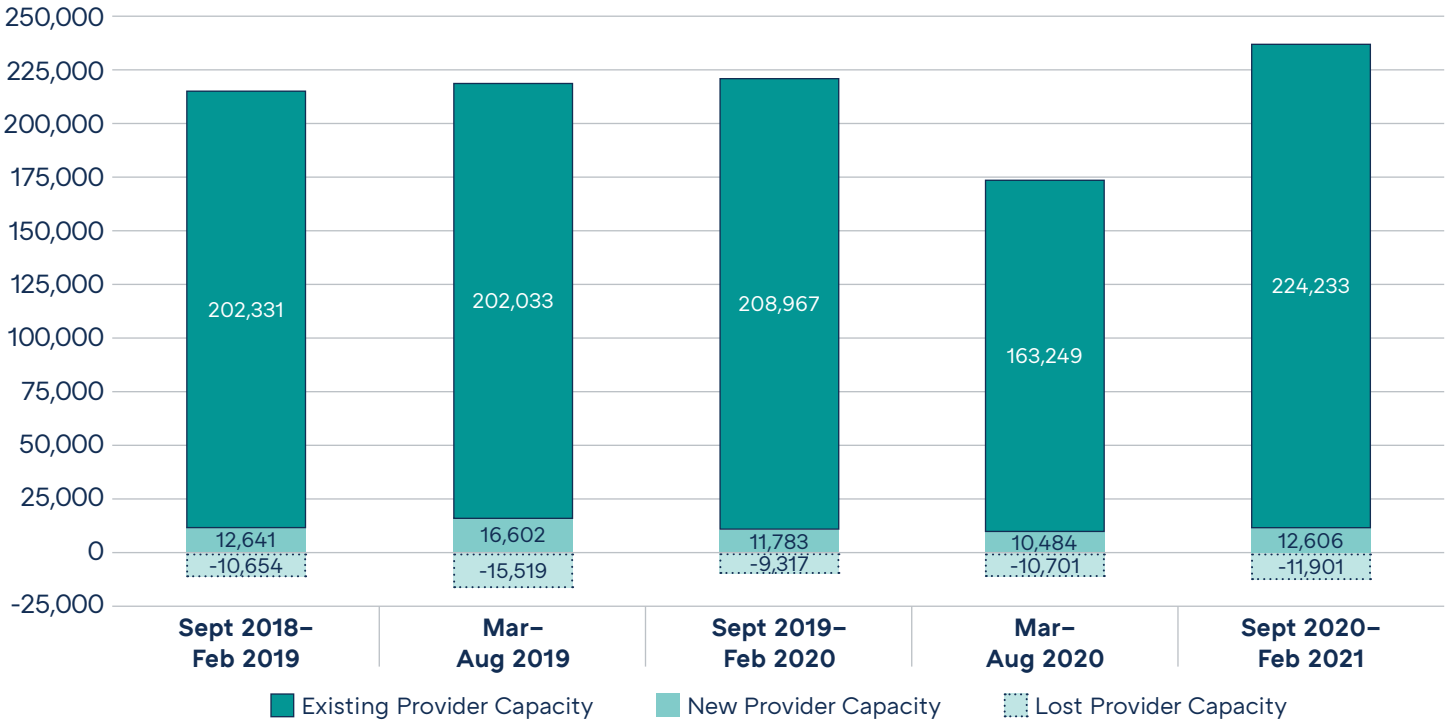


FIGURE 10b. Estimated capacity of providers that permanently closed as a share of total providers, by provider type, September 2018–February 2021

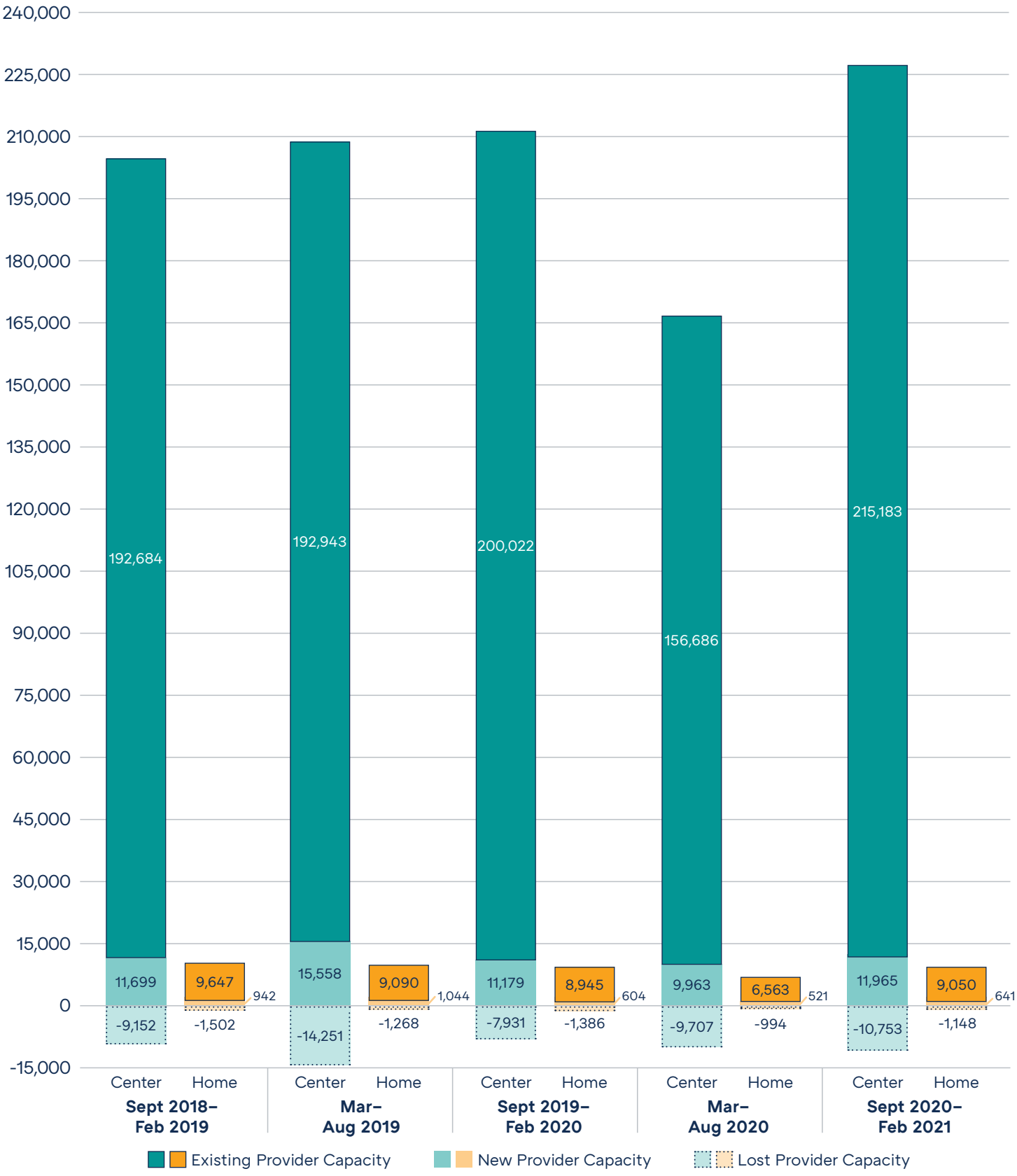
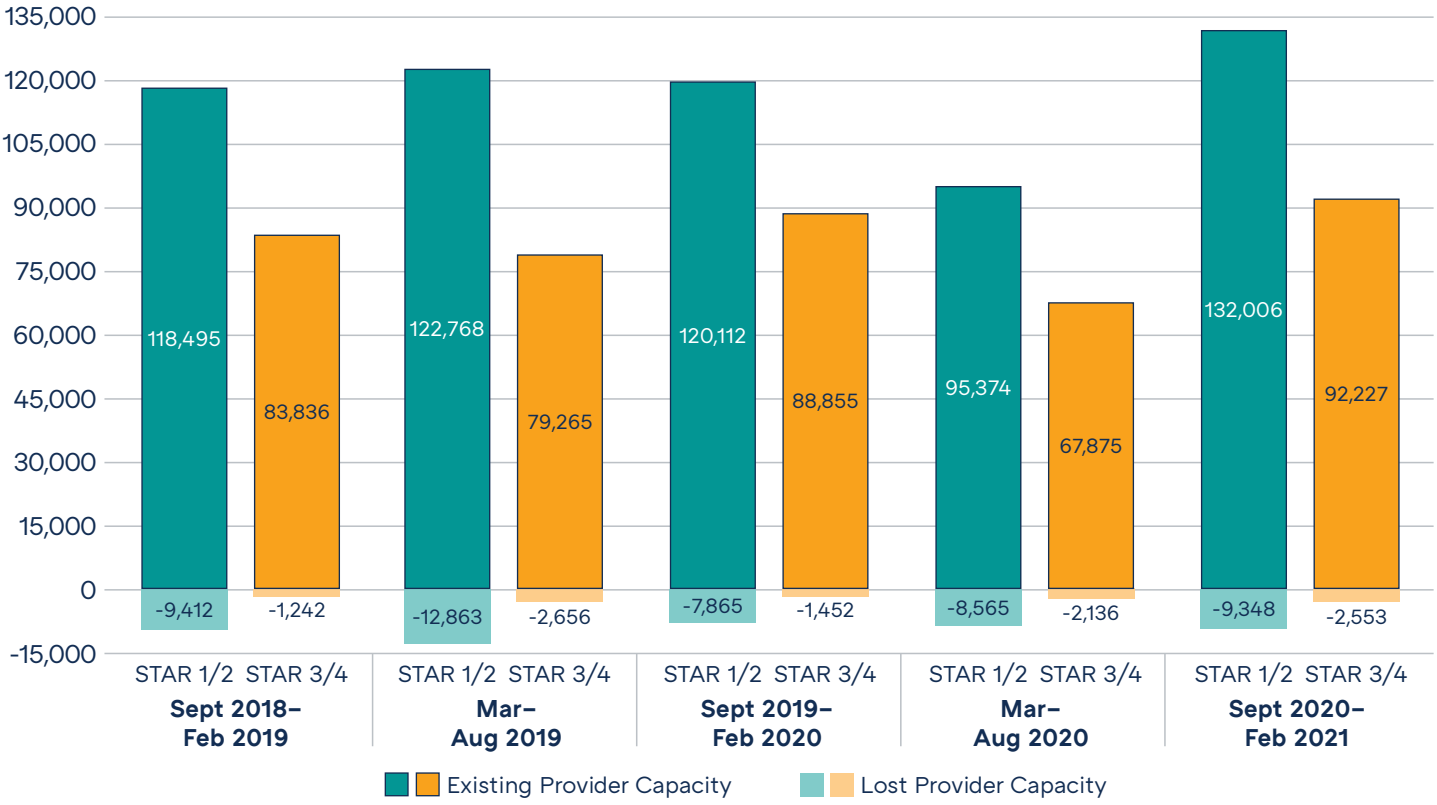


FIGURE 10c. Estimated capacity of providers that permanently closed, as a share of total provider capacity, by STAR rating, September 2018–February 2021



Note: Analysis by STAR rating does not include new providers because, in most cases, new providers had not yet obtained a STAR rating.

Trends in Lost Provider Supply by Geographic Locale

Number and Share of Permanent Closures

Overview. Relatively more child care providers permanently closed in urban and rural communities than in suburban communities, a trend that persisted across both pandemic and pre-pandemic time periods (Figure 11). In urban communities, 7.8-10.5% of providers closed permanently, depending on time period. In rural communities, that range was 8.0-9.8%, while in suburban communities it was 5.8-8.4%. During Mar-Aug 2020, urban communities had the greatest share of lost supply of any community type and time period, with 10.5% of providers closing. Suburban communities had the lowest share of permanently closed providers at any time point, at 5.8% in Sept 2020-Feb 2021. In rural communities, permanent closure counts were consistently higher than new provider counts (e.g., in Mar-Aug 2029, 138 providers permanently closed while only 88 new child care facilities opened). In suburban communities, permanent closure and new provider counts were generally comparable, while in urban communities they fluctuated. Across locales, child care homes made up a larger share of permanent provider closures compared to child care centers. Child care homes accounted for a greater share of permanent closures in urban and rural communities than in suburban ones (e.g., in Sept 2019-Feb 2020, 61.3% and 60.3% of permanent closures in urban and rural communities were child care homes, respectively, while in suburban communities that share was 49.0%).

Spring/Summer Trends. Across both spring/summer time periods, suburban communities lost smaller shares of providers to permanent closure than did urban and rural communities. From Mar-Aug 2019 to Mar-Aug 2020, the proportion of providers that closed permanently decreased slightly in suburban and rural communities, while it increased in urban communities. In cities, 10.5% (n=99) of providers closed permanently in Mar-Aug 2020, compared to 9.0% (n=127) in Mar-Aug 2019 (Figure 11 and Table A-10a). In the suburbs, 8.0% (n=74) of providers closed permanently in Mar-Aug 2020, compared to 8.4% (n=104) during the prior spring/summer time period. In rural areas, 9.4% (n=107) and 9.8% (n=138) of providers closed permanently in Mar-Aug 2020 and Mar-Aug 2019, respectively.

Relatively more child care providers permanently closed in urban and rural communities than in suburban communities, a trend that persisted across both pandemic and pre-pandemic time periods.

In Mar-Aug 2020, a greater share of child care centers closed in cities (8.8%; n=52) compared to suburban (6.2%; n=42) and rural (7.4%; n=54) communities. Among child care homes, shares of lost providers were nearly the same in urban (13.3%; n=47) and suburban (13.2%; n=32) communities, and slightly lower in rural communities (12.7%; n=53).

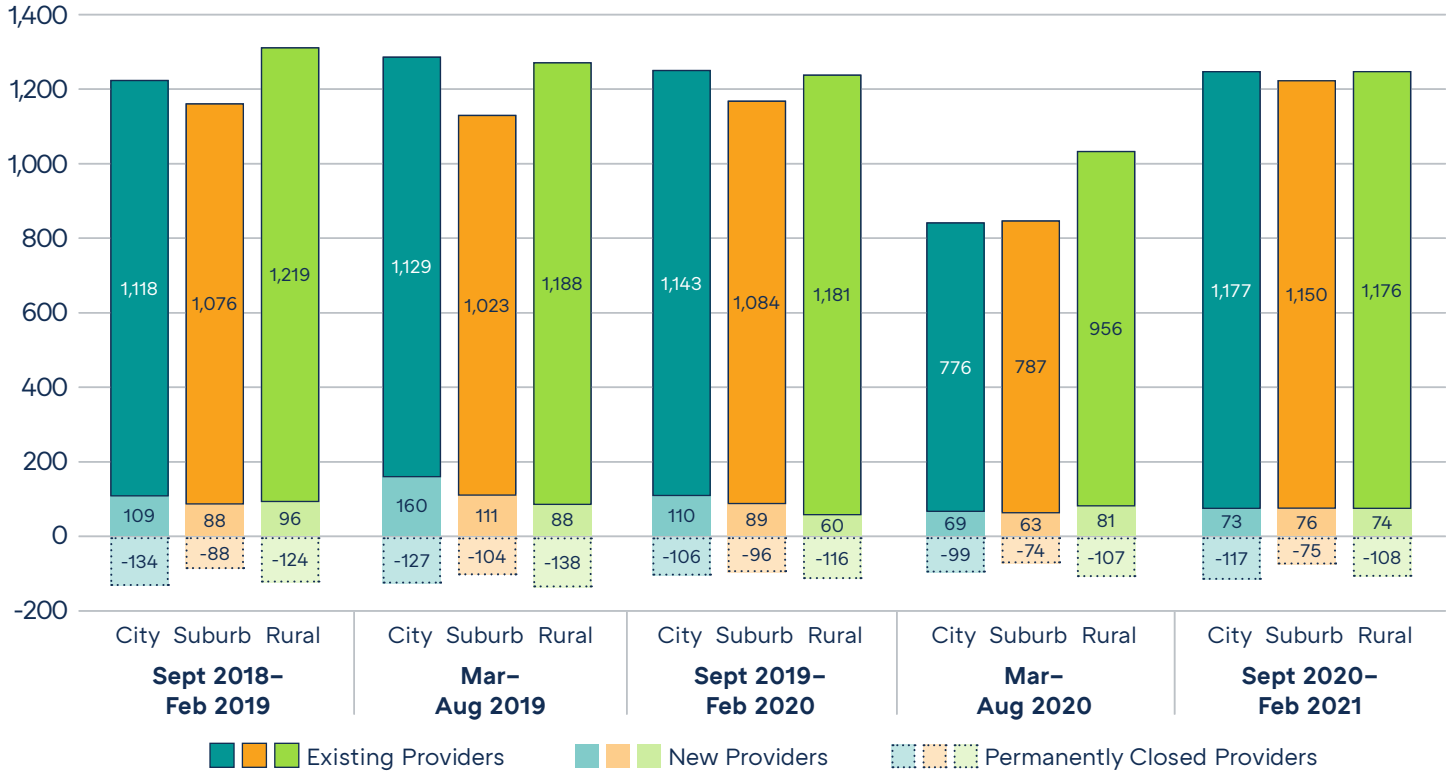
Among STAR 1/2 providers, greater shares of child care providers closed permanently in urban (13.0%; n=90) and rural (12.5%; n=96) communities in Mar-Aug 2020, compared to those in suburban communities (10.1%; n=65). Across locales, relatively fewer STAR 3/4 providers closed. Cities lost the greatest share of STAR 3/4 providers due to permanent closure (4.9%; n=9), compared to suburban (4.1%; n=9) and rural (3.7%; n=11) communities.

Fall/Winter Trends. In Sept 2020-Feb 2021, 8.6% (n=117) of potential providers closed permanently in cities, a higher share than in Sept 2019-Feb 2020 (7.8%; n=106) but lower than in Sept 2019-Feb 2020 (9.8%; n=134). In suburban and rural communities, the share of closed providers was lower in Sept 2020-Feb 2021 than in either pre-pandemic fall/winter time period. In suburban communities, 5.8% (n=75) of providers closed in Sept 2020-Feb 2021, while in rural areas that share was 8.0% (n=108).

Among child care centers, 6.4% (n=52) and 6.3% (n=54) of providers closed permanently in urban and rural communities, respectively, in Sept 2020-Feb 2021. That share was lower in suburban communities, at 4.8% (n=46). Among child care homes in Sept 2020-Feb 2021, the share of providers lost to permanent closure was highest in cities (11.8%; n=65), followed by rural communities (10.9%; n=54), with suburban communities experiencing the smallest relative loss in home-based child care providers (8.3%; n=29).

In Sept 2020-Feb 2021, 10.1% (n=104) of STAR 1/2 providers closed in cities. A similar share of STAR 1/2 providers closed in rural communities (9.8%; n=96), while the smallest share closed in suburban communities (7.2%; n=66). The same trend persisted among STAR 3/4 providers, with urban communities again experiencing the greatest relative loss (4.9%; n=13), followed by rural communities (3.9%; n=12) and suburban communities (3.0%; n=9).

FIGURE 11. Number of providers that permanently closed as a share of total providers, by geographic locale, September 2018–February 2021



Lost Capacity

Overview. During the pandemic, suburban communities lost a significantly lower percentage of potential provider capacity due to permanent closures, compared to urban and rural communities. That trend also generally held during pre-pandemic time periods. Across all time periods examined, new capacity counts in suburban communities outpaced lost capacity counts, an indication that child care supply has likely grown or been sustained over time in those communities (Figure 12). In contrast, in urban and rural communities, lost capacity counts were lower than new capacity counts during certain time periods. Across time periods, child care homes accounted for a smaller share of lost capacity in suburban communities, compared to urban and rural communities. For example, in Sept 2019-Feb 2020, child care homes accounted for 11.2% of all lost capacity in suburban communities, with child care centers accounting for 88.8%. But in urban and rural communities during that same time period, child care homes were 20.6% and 14.9% of all lost capacity, respectively.

Spring/Summer Trends. In Mar-Aug 2020, urban communities lost the greatest share of potential provider capacity as a result of permanent closure. Rural communities lost the smallest share. Across all geographic locales, shares of lost capacity were lower in Mar-Aug 2020 than in Mar-Aug 2019.

In cities, 6.3% (n=2,989) of potential child care capacity was lost in Mar-Aug 2020, compared to 7.3% (n=4,991) in Mar-Aug 2019 (Figure 12 and Table A-10b). Suburban communities lost 5.8% (n=4,065) and 6.1% (n=5,342) of potential capacity in Mar-Aug 2020 and Mar-Aug 2019, respectively. In rural communities, 5.5% (n=3,647) of potential capacity was lost in Mar-Aug 2020, compared to 6.7% (n=5,186) during the prior spring/summer time period.

Across locales, relative losses in potential capacity were greater among child care homes than child care centers. Relative losses in child care center capacity were greater in cities (5.9%; n=2,642) than in suburban (5.6%; n=3,826) and rural (5.1%; n=3,239) communities in Mar-Aug 2020. During that same time period, cities also experienced slightly greater relative losses in child care home capacity (12.5%; n=347) compared to suburban (12.4%; n=239) and rural (12.0%; n=408) communities.

Relative losses in capacity were greater among STAR 1/2 providers than among STAR 3/4 providers, a trend that persisted across locales. In Mar-Aug 2020, cities lost a greater share of STAR 1/2 providers (i.e., 9.3%; n=2,556), compared to suburban (7.5%; n=3,170) and rural (8.3%; n=2,839) communities. The opposite trend occurred among STAR 3/4 providers, with suburban communities losing 3.8% (n=895) of potential STAR 3/4 capacity, while urban and rural communities lost 2.5% (n=433) and 2.8% (n=808), respectively.

Fall/Winter Trends. In Sept 2020-Feb 2021, rural communities lost the greatest share of potential provider capacity due to permanent closure (5.5%; n=4,396), followed closely by urban communities (5.3%; n=3,710). Suburban communities lost the smallest share of potential provider capacity (3.8%; n=3,748). There was no consistent pattern between locales in terms of how the percentage of lost capacity in Sept 2020-Feb 2021 compared to prior fall/winter time periods. For example, in rural communities, the relative loss in potential capacity was greater in Sept 2020-Feb 2021 than in either pre-pandemic fall/winter time period, while in suburban communities, shares of lost capacity were nearly identical in Sept 2020-Feb 2021 and Sept 2019-Feb 2020.

In Sept 2020-Feb 2021, rural communities lost the greatest share of potential provider capacity due to permanent closure, followed closely by urban communities.

Rural areas lost the greatest share of capacity among child care centers in Sept 2020-Feb 2021 (5.3%; n=3,962), compared to urban (4.9%; n=3,222) and suburban (3.6%; n=3,522) communities. Cities experienced greater losses in child care home capacity during that time period (12.0%; n=488), compared to suburban (8.1%; n=226) and rural (10.9%; n=434) areas.

Urban and rural communities lost similar shares of STAR 1/2 provider capacity in Sept 2020-Feb 2021, at 7.6% (n=2,961) and 7.5% (n=3,290), respectively. By comparison, suburban communities lost 5.2% (n=3,050). Rural communities lost the greatest share of potential STAR 3/4 provider capacity during that time period (3.6%; n=1,106), followed by urban communities (2.7%; n=749). Like with STAR 1/2 providers, suburban communities experienced the smallest relative loss in potential STAR 3/4 provider capacity in Sept 2020-Feb 2021, at just 1.9% (n=698).

FIGURE 12. Estimated capacity of providers that permanently closed, as a share of total provider capacity, by geographic locale, September 2018–February 2021

Trends in Lost Provider Supply by Community Poverty Level

Number and Share of Permanent Closures

Overview. Across all time periods, the number of permanent provider closures was greater in low-poverty communities than in high-poverty communities. However, high poverty communities lost a greater proportion of providers, because their counts of new and existing providers were also much lower than in low-poverty communities (Figure 13). In high-poverty communities, child care homes made up a larger share of permanent closures than did child care centers. But in low-poverty communities, child care centers accounted for the majority of permanent closures in most time periods.

Spring/Summer Trends. In Mar-Aug 2020, high-poverty communities lost 11.8% (n=59) of child care providers to permanent closure. During that same time period, low-poverty communities lost 8.4% (n=99). For both community types, these losses were greater than in Mar-Aug 2019, where permanent closures led to the loss of 9.9% (n=70) and 7.4% (n=112) of providers in high- and low-poverty communities, respectively (Figure 13 and Table A-11a).

High-poverty communities lost 10.4% (n=29) of child care centers in Mar-Aug 2020, while low-poverty communities lost 6.4% (n=56) of center-based providers due to permanent closure. In high-poverty communities, 13.7% (n=30) of child care homes were lost to permanent closure. In low-poverty areas, that number and share were actually greater (14.7%; n=43).

In Mar-Aug 2020, high-poverty communities lost 14.6% (n=53) and 6.0% (n=6) of STAR 1/2 and STAR 3/4 providers, respectively. By comparison, low-poverty communities lost 10.8% (n=87) of STAR 1/2 providers and 4.2% (n=12) of STAR 3/4 providers.

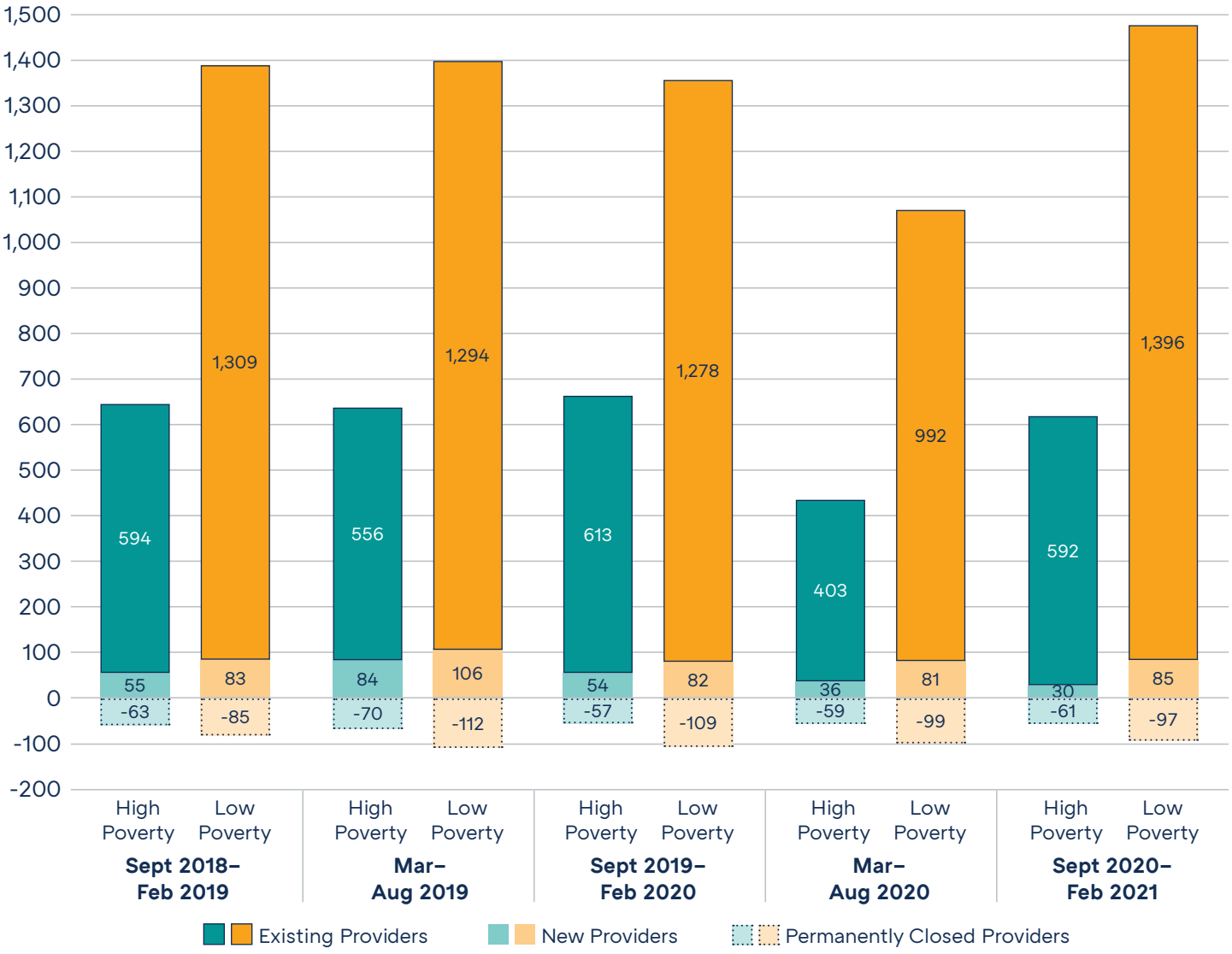
Fall/Winter Trends. In Sept 2020-Feb 2021, high-poverty communities lost 8.9% (n=61) of child care providers due to permanent closure. This share was slightly higher than in Sept 2019-Feb 2020 (7.9%; n=57) and nearly the same as in Sept 2018-Feb 2019 (8.8%; n=63). By comparison, low-poverty communities lost 6.1% (n=97) of providers in Sept 2020-Feb 2021, a lower share than in Sept 2019-Feb 2020 (7.4%; n=109) but slightly higher than in Sept 2018-Feb 2019 (5.8%; n=85).

For both child care centers and child care homes, shares of lost providers were greater in high-poverty communities than in low-poverty communities in Sept 2020-Feb 2021. High-poverty communities lost 6.5% (n=23) of child care centers due to permanent closure, and 11.6% (n=38) of child care homes. Low-poverty communities lost 4.9% (n=58) and 10.0% (n=39) of child care centers and child care homes, respectively.

For both child care centers and child care homes, shares of lost providers were greater in high-poverty communities than in low-poverty communities in Sept 2020–Feb 2021.

High-poverty communities also experienced greater losses among both STAR 1/2 and STAR 3/4 providers in Sept 2020-Feb 2021, compared to low-poverty communities. High-poverty communities lost 10.2% (n=54) and 5.6% (n=7) of STAR 1/2 and STAR 3/4 providers, respectively. Among low-poverty communities, those losses were 7.5% (n=83) and 3.7% (n=14).

FIGURE 13. Number of providers that permanently closed as a share of total providers, by community poverty level, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4%+.

Lost Capacity

Overview. As with the number of permanent provider closures, lost capacity counts were greater in low-poverty communities than in high-poverty communities. But the proportion of potential capacity that was lost due to permanent closure was greater in high-poverty communities, as these communities had far lower total capacity counts to begin with. In all time periods examined, high-poverty communities lost a greater share of potential child care capacity than low-poverty communities. During certain time periods — including during the pandemic — differences in lost capacity between high- and low-poverty communities were significant. Child care centers accounted for the vast majority of lost capacity in both high- and low-poverty communities, as compared to child care homes. Centers were a greater share of lost capacity in low-poverty communities than in high-poverty communities. For example, in Sept 2019-Feb 2020, 89.7% of lost capacity in low-poverty communities was with child care centers, compared to 81.7% in high-poverty communities.

Spring/Summer Trends. In Mar-Aug 2020, high-poverty communities lost 7.1% (n=1,675) of potential child care capacity due to permanent provider closure, though that share was lower than in Mar-Aug 2019 (7.7%; n=2421). In low-poverty communities, 5.6% of potential capacity was lost in Mar-Aug 2020 (n=5,075; see Figure 14 and Table A-11b). Like in high-poverty communities, that share was lower compared to the prior spring/summer time period (6.0%; n=6,736).

In Mar-Aug 2020, high-poverty communities lost a greater share of potential child care center capacity (6.5%; n=1,437) than low-poverty communities (5.4%; n=4,771). During that time period, high- and low-poverty communities lost the same share of potential child care home capacity (i.e., 13.6%; n=238 in high-poverty communities and n=304 in low-poverty communities).

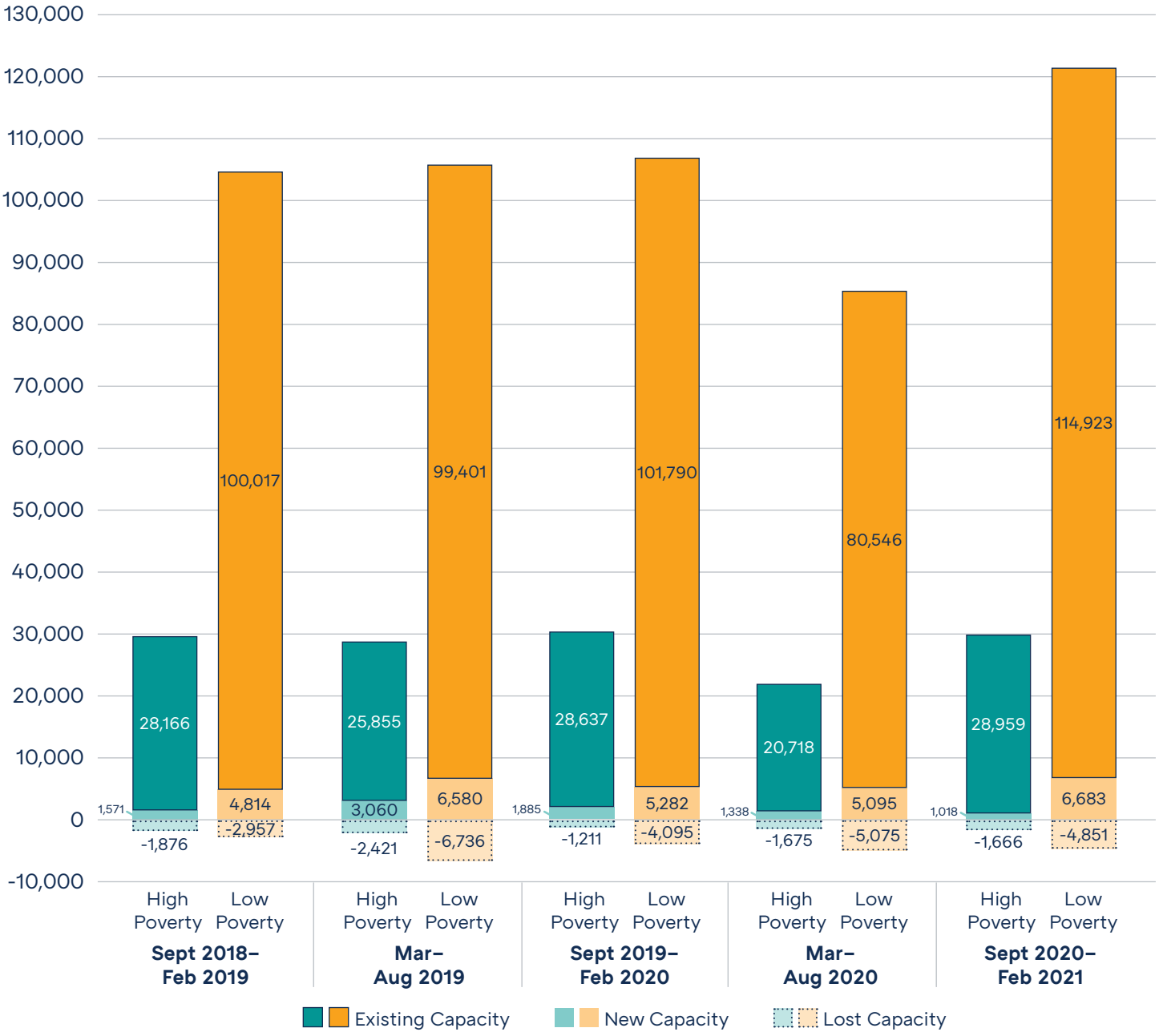
High-poverty communities lost a greater share of potential STAR 1/2 provider capacity than did low-poverty communities. In Mar-Aug 2020, 10.4% (n=1,327) of potential STAR 1/2 provider capacity was lost in high-poverty communities, compared to 7.7% (n=4,030) in low-poverty communities. High-poverty communities also lost a greater share of capacity among STAR 3/4 providers (3.6%; n=348), compared to low-poverty communities (3.1%; n=1,045).

Fall/Winter Trends. In Sept 2020-Feb 2021, high-poverty communities lost 5.3% (n=1,666) of potential child care capacity. That share was higher than in Sept 2019-Feb 2020 (3.8%; n=1,211), but lower than in Sept 2018-Feb 2019 (5.9%; n=1,876). By comparison, low-poverty communities lost just 3.8% (n=4,851) of potential capacity in Sept 2020-Feb 2021, a nearly identical rate as in Sept 2019-Feb 2020 (3.7%; n=4,095), though higher than in Sept 2018-Feb 2019 (2.7%; n=2,957).

High-poverty communities lost greater shares of potential capacity in both child care centers and child care homes in Sept 2020-Feb 2021, compared to low-poverty communities. High-poverty communities lost 4.7% (n=1,383) and 11.4% (n=283) of capacity in centers and homes, respectively, while low-poverty communities lost 3.7% (n=4,548) of potential capacity in child care centers and 10.1% (n=303) of potential capacity in child care homes.

Like in Mar-Aug 2020, high-poverty communities lost a greater share of STAR 1/2 provider capacity than did low-poverty communities in Sept 2020-Feb 2021 (i.e., 7.9% vs. 4.9%). However, among STAR 3/4 providers, that trend flipped, with low-poverty communities losing a greater share of potential capacity (2.8%; n=1,337) compared to high-poverty communities (2.1%; n=274).

FIGURE 14. Estimated capacity of providers that permanently closed, as a share of total provider capacity, by community poverty level, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4%+.

Trends in Lost Provider Supply by Community Racial Composition

Number and Share of Permanent Closures

Overview. Predominantly White communities (i.e., communities with the greatest percentages of White residents) had more providers close permanently than did communities of color (i.e., communities with the lowest percentages of White residents). But, because communities of color had far fewer child care providers to begin with, they experienced greater relative losses (i.e., proportions) in child care provider supply in four of the five time periods examined. In both predominantly White communities and communities of color, child care homes were a greater share of permanent closures than child care centers (except in predominantly White communities in Sept 2020-Feb 2021, when their share was 47.4%).

Spring/Summer Trends. In Mar-Aug 2020, predominantly White communities lost 9.7% of child care providers (n=105), a slightly higher share than in Mar-Aug 2019 (9.4%; n=128). Communities of color lost 10.2% of providers (n=55) in Mar-Aug 2020, the same share as in Mar-Aug 2019 (n=91; see Figure 15 and Table A-12a).

In Mar-Aug 2020, predominantly White communities lost a greater share of child care homes, while communities of color lost a greater share of child care centers. During that time period, predominantly White communities lost 7.2% (n=51) of child care centers and 14.6% (n=54) of child care homes. By comparison, communities of color lost 8.8% (n=27) of centers and 12.1% (n=28) of homes.

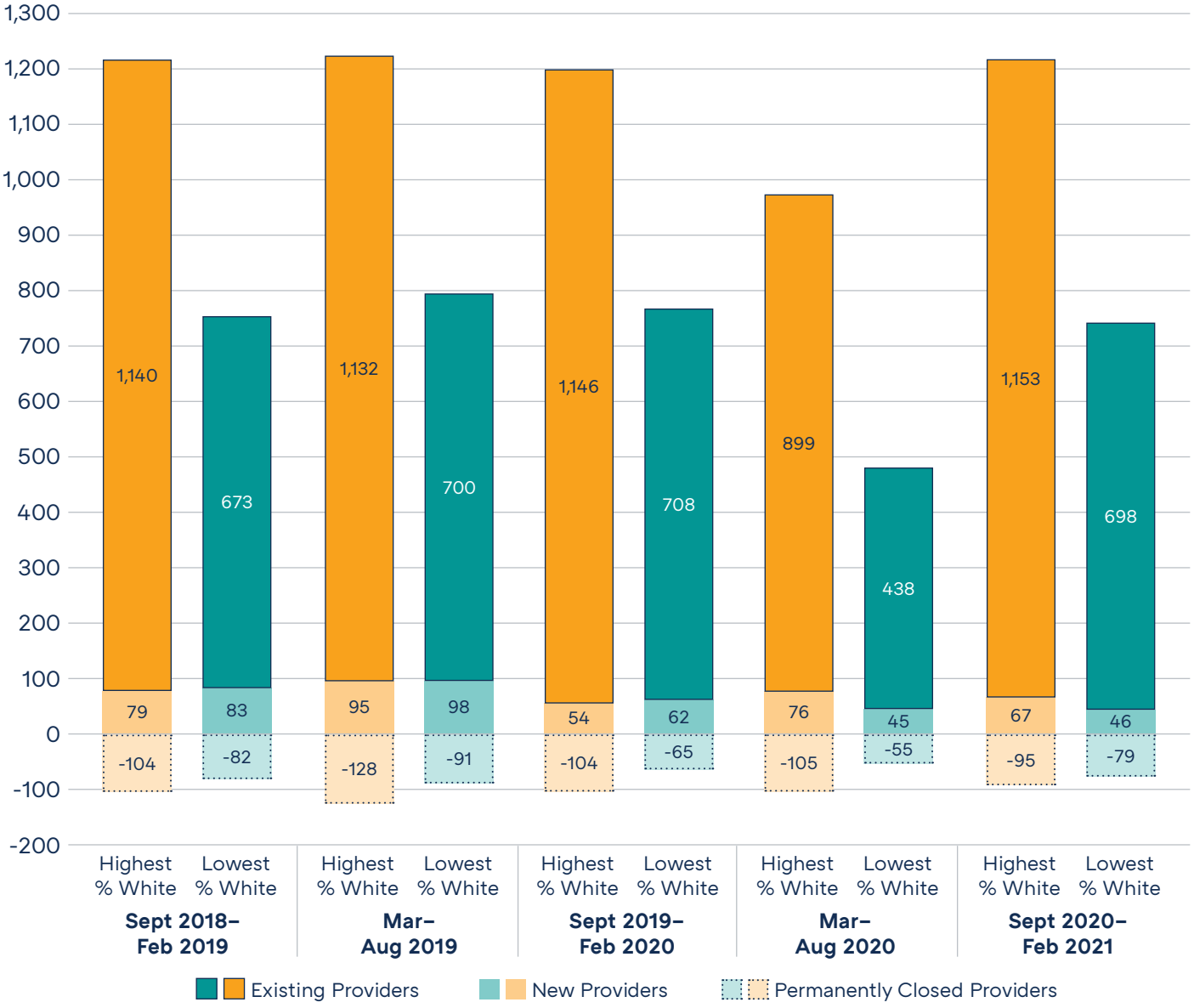
In Mar-Aug 2020, predominantly White communities lost 12.5% (n=93) of STAR 1/2 providers due to permanent closure. Communities of color lost a similar share of STAR 1/2 providers during that time period (12.7%; n=52). In contrast, predominantly White communities lost a greater share of STAR 3/4 providers (4.6%; n=12) than did communities of color (3.6%; n=3), though sample sizes were small.

Fall/Winter Trends. In Sept 2020-Feb 2021, predominantly White communities lost 7.2% of child care providers (n=95), a lower share than in either pre-pandemic fall/winter time period. Communities of color lost 9.6% of providers in Sept 2020-Feb 2021 (n=79), a greater share than in Sept 2019-Feb 2020 (7.9%; n=65) but slightly smaller than in Sept 2018-Feb 2019 (9.8%; n=82).

Across fall/winter time periods, communities of color lost relatively more child care centers due to permanently closure than did predominantly White communities. For example, in Sept 2020-Feb 2021, communities of color lost 7.3% (n=34) of child care centers while predominantly White communities lost 5.6% (n=50). Among child care homes, trends were less consistent, with both communities of color and predominantly White communities losing greater shares of home-based providers during different time periods. During the focal pandemic time period of this study (i.e., Sept 2020-Feb 2021), predominantly White communities lost 10.8% (n=45) of child care homes while communities of color lost 12.5% (n=45).

In Sept 2020-Feb 2021, predominantly White communities lost 8.8% (n=82) of STAR 1/2 providers and 4.1% (n=13) of STAR 3/4 providers. By comparison, communities of color lost 11.1% (n=74) of STAR 1/2 providers and 4.4% (n=5) of STAR 3/4 providers.

FIGURE 15. Number of providers that permanently closed as a share of total providers, by community racial composition, September 2018–February 2021



Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

Lost Capacity

Overview. Across all time periods examined, predominantly White communities lost a greater number of potential enrollment slots due to permanent provider closure, compared to communities of color. However, communities of color lost a greater relative share of potential capacity in four of the five time periods examined (in Sept 2019-Feb 2020, both community types lost an estimated 4.0% of potential capacity). Child care centers accounted for the vast majority of lost capacity in both predominantly White communities and communities of color, though their shares were slightly higher in predominantly White communities (e.g., in Mar-Aug 2019, 91.6% of lost capacity in predominantly White communities came from centers, compared to 85.5% in communities of color).

Spring/Summer Trends. In Mar-Aug 2020, predominantly White communities lost 5.8% (n=3,833) of potential capacity as a result of permanent provider closures. By comparison, communities of color lost 6.4% (n=1,413; see Figure 16 and Table A-12b). For both community types, these relative losses were smaller than in Mar-Aug 2019, where permanent closures led to the loss of 6.4% and 7.1% of potential capacity in predominantly White communities and communities of color, respectively.

Communities of color lost a greater share of child care center capacity compared to predominantly White communities. In Mar-Aug 2020, communities of color lost 5.9% (n=1,193) of potential child care center capacity, while predominantly White communities lost 5.4% (n=3,422). That trend flipped for child care homes, with predominantly White communities losing 13.8% (n=411) of potential capacity and communities of color losing 11.9% (n=220).

In Mar-Aug 2020, communities of color lost a slightly greater share of capacity among STAR 1/2 providers, while predominantly White communities lost relatively more potential enrollment slots among STAR 3/4 providers. During that time period, predominantly White communities lost 7.9% (n=2,930) and 3.5% (n=903) of capacity among STAR 1/2 and STAR 3/4 providers, respectively, while communities of color lost 8.4% (n=1,254) and 2.9% (n=159).

Fall/Winter Trends. In Sept 2020-Feb 2021, predominantly White communities lost 4.9% (n=4,179) of potential child care capacity due to permanent provider closure. During that same time period, communities of color lost 6.0% (2,077) of potential capacity. For predominantly White communities, the share of potential capacity that was lost in Sept 2020-Feb 2021 was greater than either previous fall/winter time period (i.e., 3.7% and 4.0%). For communities of color, the relative loss in capacity in Sept 2020-Feb 2021 was greater than in Sept 2019-Feb 2020 (4.0%), but slightly smaller than in Sept 2018-Feb 2019 (6.1%). Notably, in communities of color, new capacity counts were greater than lost capacity counts in all pre-pandemic time periods examined. However, in Sept 2020-Feb 2021, lost capacity exceeded new capacity. In predominantly White communities, the new capacity count was greater than the lost capacity count in Sept 2020-Feb 2021.

In Sept 2020–Feb 2021, communities of color lost relatively more capacity in both child care centers and child care homes, compared to predominantly White communities.

In Sept 2020-Feb 2021, communities of color lost relatively more capacity in both child care centers and child care homes, compared to predominantly White communities. During that time period, communities of color lost 5.5% (n=1,730) and 12.4% (n=347) of potential capacity in centers and homes, respectively, while predominantly White communities lost 4.6% (n=3,799) and 11.2% (n=380).

In Sept 2020-Feb 2021, communities of color lost a greater share of potential capacity among STAR 1/2 providers, but a smaller share among STAR 3/4 providers, compared to predominantly White communities. During that time period, communities of color lost 8.5% (n=1,959) and 1.2% (n=119) of capacity among STAR 1/2 and STAR 3/4 providers, respectively. Predominantly White communities lost 6.5% (n=3,001) of STAR 1/2 capacity and 3.4% (n=1,178) of STAR 3/4 capacity.

FIGURE 16. Estimated capacity of providers that permanently closed, as a share of total provider capacity, by community racial composition, September 2018–February 2021

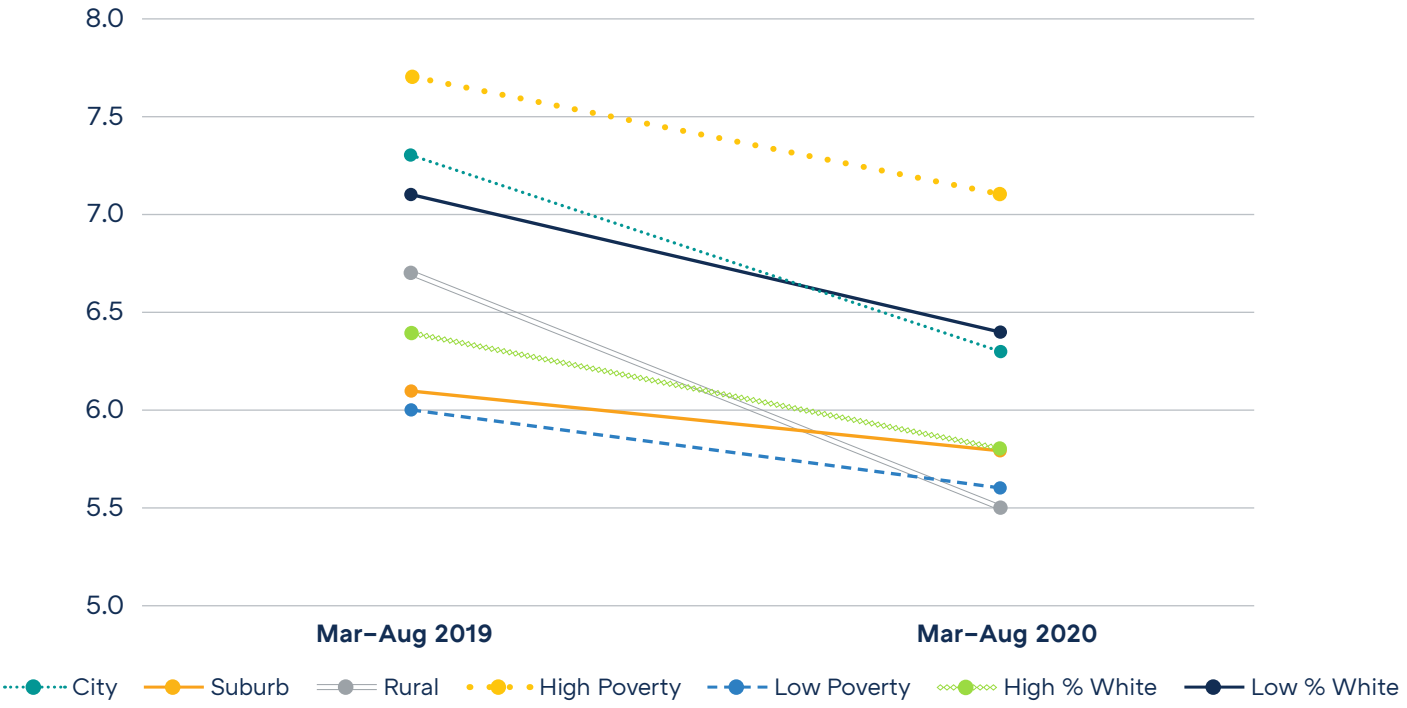
Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

Side-by-side Comparison of Lost Capacity by Community Characteristics

Spring/Summer Time Periods

All communities experienced relatively smaller losses in child care provider capacity in Mar-Aug 2020 than in Mar-Aug 2019, a remarkably positive trend that suggests policy efforts to support child care providers during the early months of the pandemic were effective. A side-by-side comparison showing the estimated percentage of capacity that was lost to permanent closures helps illustrate relative differences between communities.[44] That is, declines in lost capacity were greater in some communities (e.g., rural) and smaller in others (e.g., suburban). Figure 17 also illustrates which communities lost relatively more enrollment slots both before and during the pandemic. Notably, high-poverty communities (yellow line) lost relatively high shares of capacity, and low-poverty communities (light blue line) lost relatively low shares.

FIGURE 17. Estimated percentage of lost child care provider capacity, by community characteristics, spring/summer time periods



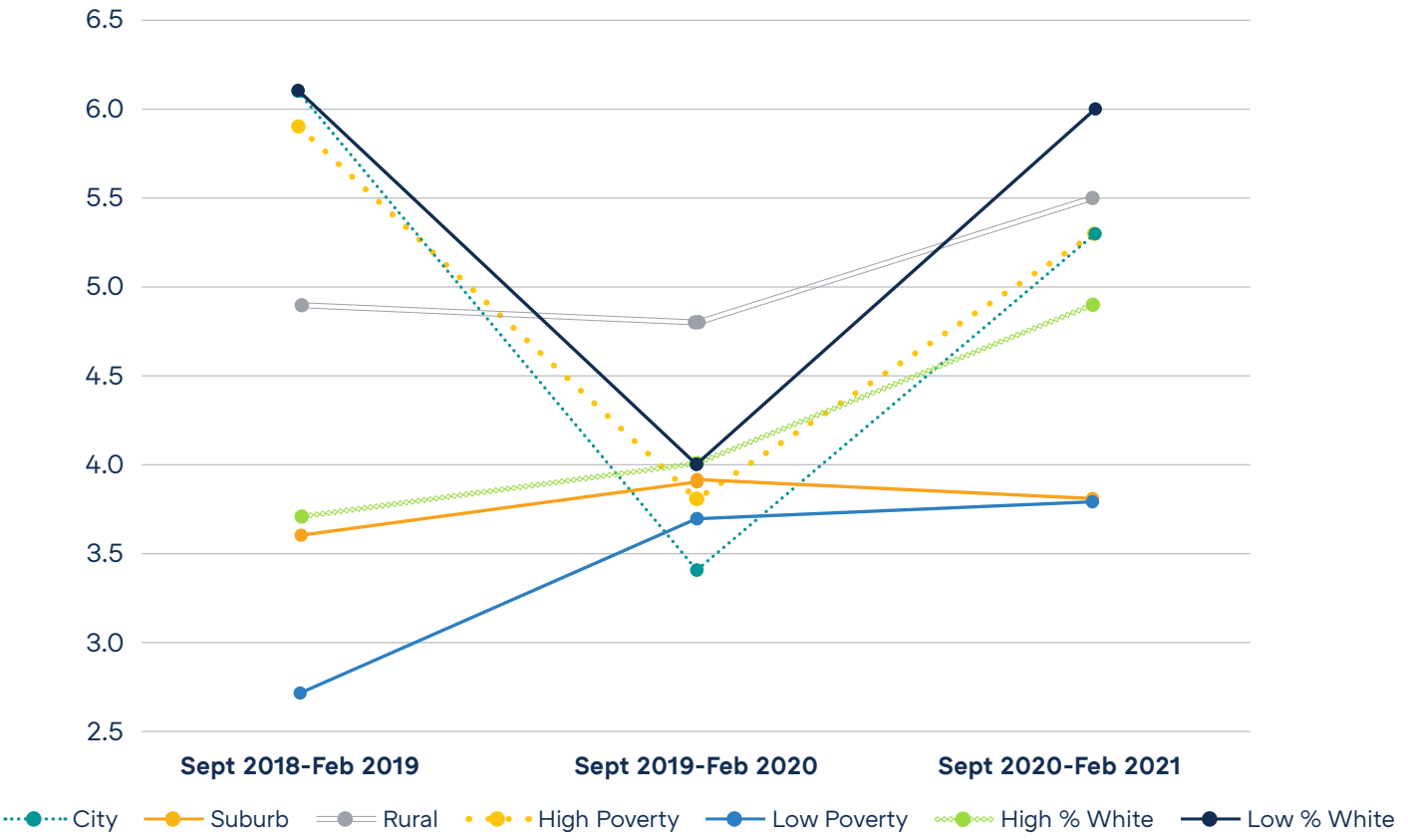
Note: The y-axis represents the share of potential providers that was lost in each community due to permanent provider closures. For example, rural communities (gray line) lost an estimated 6.7% of potential enrollment slots in Mar-Aug 2019, and 5.5% in Mar-Aug 2020.

44 In Pennsylvania, these community-level demographic characteristics often overlap. For example, cities are more likely to have concentrated populations of families of color, and in many parts of the state, poverty is also concentrated in communities of color. Therefore, these trends may reflect overlapping populations of providers.

Fall/Winter Time Periods

Analysis of changes in lost provider capacity during fall/winter time periods reveals three distinct groups. First, rural communities (gray line), predominantly White communities (green line), and low-poverty communities (light blue line) experienced greater losses in capacity during the pandemic, as seen in the upward slope of their lines on Figure 18. Second, in suburban communities (orange line), losses in capacity were relatively comparable during both pre-pandemic and pandemic time periods. Third, in cities (royal blue line), high-poverty communities (yellow line), and communities of color (dark blue line), losses in capacity decreased in Sept 2019-Feb 2020 but increased in Sept 2020-Feb 2021, as evidenced by their v-shaped lines. More research is needed to determine whether these trends persisted during the second and third years of the pandemic, as well as the potential mechanisms that may underly them. At the same time, these three data points do provide strong suggestive evidence of greater losses in capacity in certain communities during the fall and winter, including rural communities and communities of color.

FIGURE 18. Estimated percentage of lost child care provider capacity, by community characteristics, spring/summer time periods



Note: The y-axis represents the share of potential providers that was lost in each community due to permanent provider closures. For example, rural communities (gray line) lost an estimated 4.9% of potential enrollment slots in Sept 2018-Feb 2019, 4.8% in Sept 2019-Feb 2020, and 5.5% in Sept 2020-Feb 2021.

Summary of Trends in Lost Provider Supply

Relative losses in child care supply were greater among certain types of providers and certain types of communities. STAR 1/2 providers and child care homes experienced a significantly greater prevalence of permanent closure compared to STAR 3/4 providers and child care centers, a trend that persisted across community contexts. Cities, as well as rural communities, had higher shares of permanent provider closure compared to suburban communities. Likewise, relative losses in provider supply were greater in high-poverty communities and communities of color, compared to low-poverty communities and predominantly White communities. The permanent closure of child care facilities led to substantial losses in potential capacity. While some communities were able to offset these losses through the creation of new capacity (i.e., new providers opening) during each six-month time period, others weren't. In cities and high-poverty communities, lost capacity counts exceeded new capacity counts during both pandemic time periods, suggesting the pandemic may have initiated a pattern of gradually shrinking child care supply in these areas. More research is needed to determine whether these patterns persisted through later pandemic years (i.e., fall 2021 and throughout 2022) or whether child care supply has since stabilized in these communities.

Contrary to our expectations, we did not observe substantial increases in the share of providers that closed permanently during the pandemic time periods examined. This finding suggests that state and federal policies designed to support child care providers during this time of crisis were effective in doing so.[45] At the same time, while the proportion of provider closures appeared to remain largely stable, lost capacity counts did spike in certain communities in Sept 2020-Feb 2021 (specifically, low-poverty communities, predominantly White communities, and rural communities). This finding should not be overlooked, and underscores the need for additional research that monitors lost child care supply in subsequent pandemic time periods.

While our analysis intended to focus on changes in permanent provider closure during pandemic time periods, a key finding is that many of the trends that occurred during the pandemic were also present before it. Even before the COVID-19 virus hit, child care homes and STAR 1/2 providers were more likely to close than child care centers and STAR 3/4 providers. High-poverty communities had significantly greater rates of permanent provider closure than did low-poverty communities. And urban and rural communities lost relatively more child care supply than suburban communities. This finding suggests that resources targeted to these provider types and communities to address pandemic-era disparities may also help ameliorate longstanding gaps in child care supply.

Lastly, this analysis underscores the importance of understanding lost child care supply alongside new and existing child care supply. Looking at only raw counts of provider closures and lost capacity would lead to the false assumption that suburban, low-poverty, and predominantly White communities were hardest hit by provider closures, as such counts in those communities were higher. Yet the proportions of providers that closed permanently — i.e., the number of permanent closures in relation to the numbers of new and existing providers — were higher in urban, rural, and high-poverty communities and communities of color. Indeed, an important finding from this analysis is that many of the communities with the greatest relative losses in provider supply also had lower counts of new and existing provider supply. Put another way, the places where families had fewer child care options to begin with were also the ones that lost more of those options. This finding suggests that a dual-pronged policy approach that aims to both reduce child care provider closures while also supporting the ongoing operation of new and existing providers may be necessary to equalize child care supply across community contexts.

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45 This finding may also be a sign of limitations inherent to our methodology. Certificate renewal counts jumped in Sept 2020-Feb 2021, relative to prior fall/winter time periods. This spike may in part have been caused by some providers not being able to renew their certificates in Mar-Aug 2020 because of stay-at-home orders and other mitigation initiatives, and then doing so in the fall when more agencies and support structures were fully reopened. These higher existing provider counts may have inflated total provider counts, in turn artificially reducing the relative share of closed providers during that time period. Simply put, the proportion of closed providers may have been higher in Sept 2020-Feb 2021 than our data measures indicate.

Conclusion and Implications

Put together, findings for new, existing, and lost provider supply show certain communities in Pennsylvania experienced greater relative declines in child care supply during the pandemic. The communities most affected by these reductions were cities, rural communities, high-poverty communities, and communities of color. In many cases, the supply of child care providers in these communities was already low even before the onset of the pandemic. Our findings also show relatively steep declines in the supply of child care homes, in particular. To remedy these inequalities and ensure all families in Pennsylvania have access to the benefits of stable child care, we make the following recommendations for research and policy.

1. Extend the study of trends in child care supply to the second and third years of the pandemic to determine whether the findings observed here persisted or changed.
2. Conduct qualitative research to better understand the barriers new and existing providers face in opening and sustaining child care facilities, especially in communities where child care supply is low.
3. Based on research and feedback from providers, target resources to high-need communities to support the growth of child care providers.
4. Study the experience of child care homes to better understand why these providers have higher rates of permanent closure. Provide additional resources to support and expand Pennsylvania's supply of home-based child care providers, especially in the communities that rely more heavily on them.

Appendix

TABLE A-1. New certificates of compliance, September 2018–February 2021

	TIME PERIOD					% CHANGE	
	Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021	Mar 2019–Mar 2020	Sept 2019–Sept 2020
Count	293	359	259	213	223	-40.7%	-13.9%
Child care centers	171	234	179	150	146	-35.9%	-18.4%
Child care homes	122	125	80	63	77	-49.6%	-3.8%
Capacity	12,641	16,602	11,783	10,484	12,606	-36.9%	7.0%
Child care centers	11,699	15,558	11,179	9,963	11,965	-36.0%	7.0%
Child care homes	942	1,044	604	521	641	-50.1%	6.1%

TABLE A-2a. New certificates of compliance, by geographic locale, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Locale	Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021	Mar 2019–Mar 2020	Sept 2019–Sept 2020
City	109	160	110	69	73	-56.9%	-33.6%
Child care centers	48	90	76	44	42	-51.1%	-44.7%
Child care homes	61	70	34	25	31	-64.3%	-8.8%
Suburb	88	111	89	63	76	-43.2%	-14.6%
Child care centers	59	84	62	49	48	-41.7%	-22.6%
Child care homes	29	27	27	14	28	-48.1%	3.7%
Town/Rural	96	88	60	81	74	-8.0%	23.3%
Child care centers	64	60	41	57	56	-5.0%	36.6%
Child care homes	32	28	19	24	18	-14.3%	-5.3%

TABLE A-2b. Estimated capacity of new certificates, by geographic locale, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Locale	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
City	3,427	6,496	4,233	2,483	3,034	-61.8%	-28.3%
Child care centers	2,944	5,967	3,980	2,265	2,815	-62.0%	-29.3%
Child care homes	483	529	253	218	219	-58.8%	-13.4%
Suburb	4,837	5,898	4,971	4,550	5,034	-22.9%	1.3%
Child care centers	4,618	5,656	4,786	4,448	4,786	-21.4%	0.0%
Child care homes	219	242	185	102	248	-57.9%	34.1%
Town/Rural	4,377	4,208	2,579	3,451	4,538	-18.0%	76.0%
Child care centers	4,137	3,935	2,413	3,250	4,364	-17.4%	80.9%
Child care homes	240	273	166	201	174	-26.4%	4.8%

TABLE A-3a. New certificates of compliance, by community poverty level, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Poverty Level	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
High	55	84	54	36	30	-57.1%	-44.4%
Child care centers	25	44	31	26	12	-40.9%	-61.3%
Child care homes	30	40	23	10	18	-75.0%	-21.7%
Middle high	75	91	51	48	56	-47.3%	9.8%
Child care centers	35	55	36	27	33	-50.9%	-8.3%
Child care homes	40	36	15	21	23	-41.7%	53.3%
Middle low	79	78	72	46	52	-41.0%	-27.8%
Child care centers	48	50	44	35	38	-30.0%	-13.6%
Child care homes	31	28	28	11	14	-60.7%	-50.0%
Low	83	106	82	81	85	-23.6%	3.7%
Child care centers	62	85	68	60	63	-29.4%	-7.4%
Child care homes	21	21	14	21	22	0.0%	57.1%

Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4+.

TABLE A-3b. Estimated capacity of new certificates, by community poverty level, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Poverty Level	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
High	1,571	3,060	1,885	1,338	1,018	-56.3%	-46.0%
Child care centers	1,337	2,751	1,723	1,248	880	-54.6%	-48.9%
Child care homes	234	309	162	90	138	-70.9%	-14.8%
Middle high	2,430	3,204	2,048	1,646	1,989	-48.6%	-2.9%
Child care centers	2,100	2,900	1,931	1,465	1,790	-49.5%	-7.3%
Child care homes	330	304	117	181	199	-40.5%	70.1%
Middle low	3,703	3,758	2,568	2,041	2,916	-45.7%	13.6%
Child care centers	3,477	3,513	2,356	1,958	2,798	-44.3%	18.8%
Child care homes	226	245	212	83	118	-66.1%	-44.3%
Low	4,814	6,580	5,282	5,095	6,683	-22.6%	26.5%
Child care centers	4,662	6,394	5,169	4,928	6,497	-22.9%	25.7%
Child care homes	152	186	113	167	186	-10.2%	64.6%

Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4+.

TABLE A-4a. New certificates of compliance, by community racial composition, September 2018–February 2021

	TIME PERIOD					% CHANGE	
% White residents	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
Highest	79	95	54	76	67	-20.0%	24.1%
Child care centers	53	71	36	55	52	-22.5%	44.4%
Child care homes	26	24	18	21	15	-12.5%	-16.7%
Middle high	64	88	79	47	67	-46.6%	-15.2%
Child care centers	44	62	62	37	54	-40.3%	-12.9%
Child care homes	20	26	17	10	13	-61.5%	-23.5%
Middle low	66	78	64	43	43	-44.9%	-32.8%
Child care centers	34	48	44	27	16	-43.8%	-63.6%
Child care homes	32	30	20	16	27	-46.7%	35.0%
Lowest	83	98	62	45	46	-54.1%	-25.8%
Child care centers	39	53	37	29	24	-45.3%	-35.1%
Child care homes	44	45	25	16	22	-64.4%	-12.0%

Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

TABLE A-4b. Estimated capacity of new certificates, by community racial composition, September 2018–February 2021

	TIME PERIOD					% CHANGE	
% White residents	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
Highest	3,450	4,954	2,195	3,556	5,064	-28.2%	130.7%
Child care centers	3,258	4,720	2,047	3,384	4,932	-28.3%	140.9%
Child care homes	192	234	148	172	132	-26.5%	-10.8%
Middle high	3,650	5,037	4,893	3,304	4,768	-34.4%	-2.6%
Child care centers	3,486	4,816	4,774	3,215	4,654	-33.2%	-2.5%
Child care homes	164	221	119	89	114	-59.7%	-4.2%
Middle low	3,358	3,553	2,649	1,731	1,470	-51.3%	-44.5%
Child care centers	3,121	3,309	2,501	1,595	1,251	-51.8%	-50.0%
Child care homes	237	244	148	136	219	-44.3%	48.0%
Lowest	2,060	3,058	2,046	1,529	1,304	-50.0%	-36.3%
Child care centers	1,711	2,713	1,857	1,405	1,128	-48.2%	-39.3%
Child care homes	349	345	189	124	176	-64.1%	-6.9%

Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

TABLE A-5. Certificate renewals, September 2018–February 2021

	TIME PERIOD					% CHANGE	
	Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021	Mar 2019–Mar 2020	Sept 2019–Sept 2020
Count	3,420	3,340	3,408	2,526	3,503	-24.4%	2.8%
Child care centers	2,159	2,186	2,230	1,706	2,335	-22.0%	4.7%
Child care homes	1,261	1,154	1,178	820	1,168	-28.9%	-0.8%
STAR 1 & 2	2,638	2,553	2,576	1,856	2,660	-27.3%	3.3%
STAR 3 & 4 (high quality)	782	787	832	670	843	-14.9%	1.3%
Estimated capacity	202,331	202,033	208,967	163,249	224,233	-19.2%	7.3%
Child care centers	192,684	192,943	200,022	156,686	215,183	-18.8%	7.6%
Child care homes	9,647	9,090	8,945	6,563	9,050	-27.8%	1.2%
STAR 1 & 2	118,495	122,768	120,112	95,374	132,006	-22.3%	9.9%
STAR 3 & 4 (high quality)	83,836	79,265	88,855	67,875	92,227	-14.4%	3.8%

TABLE A-6a. Certificate renewals, by geographic locale, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Locale	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
City	1,118	1,129	1,143	776	1,177	-31.3%	3.0%
Child care centers	661	665	699	494	724	-25.7%	3.6%
Child care homes	457	464	444	282	453	-39.2%	2.0%
STAR 1 & 2	910	917	895	601	922	-34.5%	3.0%
STAR 3 & 4 (high quality)	208	212	248	175	255	-17.5%	2.8%
Suburb	1,076	1,023	1,084	787	1,150	-23.1%	6.1%
Child care centers	763	774	791	590	857	-23.8%	8.3%
Child care homes	313	249	293	197	293	-20.9%	0.0%
STAR 1 & 2	803	753	802	579	857	-23.1%	6.9%
STAR 3 & 4 (high quality)	273	270	282	208	293	-23.0%	3.9%
Town/Rural	1,219	1,188	1,181	956	1,176	-19.5%	-0.4%
Child care centers	729	747	740	615	754	-17.7%	1.9%
Child care homes	490	441	441	341	422	-22.7%	-4.3%
STAR 1 & 2	920	883	879	672	881	-23.9%	0.2%
STAR 3 & 4 (high quality)	299	305	302	284	295	-6.9%	-2.3%

TABLE A-6b. Estimated capacity of certificate renewals, by geographic locale, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Locale	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
City	56,128	56,812	60,023	42,209	63,159	-25.7%	5.2%
Child care centers	52,771	53,307	56,743	40,008	59,796	-24.9%	5.4%
Child care homes	3,357	3,505	3,280	2,201	3,363	-37.2%	2.5%
STAR 1 & 2	34,047	36,810	34,021	25,054	35,918	-31.9%	5.6%
STAR 3 & 4 (high quality)	22,081	20,002	26,002	17,155	27,241	-14.2%	4.8%
Suburb	79,598	76,796	81,203	61,389	90,739	-20.1%	11.7%
Child care centers	77,166	74,767	78,922	59,804	88,424	-20.0%	12.0%
Child care homes	2,432	2,029	2,281	1,585	2,315	-21.9%	1.5%
STAR 1 & 2	47,663	46,853	48,125	38,946	55,513	-16.9%	15.4%
STAR 3 & 4 (high quality)	31,935	29,943	33,078	22,443	35,226	-25.0%	6.5%
Town/Rural	66,113	68,425	67,741	59,279	70,335	-13.4%	3.8%
Child care centers	62,261	64,869	64,357	56,502	66,963	-12.9%	4.0%
Child care homes	3,852	3,556	3,384	2,777	3,372	-21.9%	-0.4%
STAR 1 & 2	36,543	39,105	37,966	31,199	40,575	-20.2%	6.9%
STAR 3 & 4 (high quality)	29,570	29,320	29,775	28,080	29,760	-4.2%	-0.1%

TABLE A-7a. Certificate renewals, by community poverty level, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Poverty Level	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
Highest	594	556	613	403	592	-27.5%	-3.4%
Child care centers	317	291	321	224	321	-23.0%	0.0%
Child care homes	277	265	292	179	271	-32.5%	-7.2%
STAR 1 & 2	479	452	476	309	475	-31.6%	-0.2%
STAR 3 & 4 (high quality)	115	104	137	94	117	-9.6%	-14.6%
Middle high	699	705	725	490	739	-30.5%	1.9%
Child care centers	390	418	422	301	436	-28.0%	3.3%
Child care homes	309	287	303	189	303	-34.1%	0.0%
STAR 1 & 2	561	565	571	364	572	-35.6%	0.2%
STAR 3 & 4 (high quality)	138	140	154	126	167	-10.0%	8.4%
Middle low	807	785	792	628	776	-20.0%	-2.0%
Child care centers	488	491	517	405	510	-17.5%	-1.4%
Child care homes	319	294	275	223	266	-24.1%	-3.3%
STAR 1 & 2	626	596	606	460	585	-22.8%	-3.5%
STAR 3 & 4 (high quality)	181	189	186	168	191	-11.1%	2.7%
Lowest	1,309	1,294	1,278	992	1,396	-23.3%	9.2%
Child care centers	953	986	970	764	1,068	-22.5%	10.1%
Child care homes	356	308	308	228	328	-26.0%	6.5%
STAR 1 & 2	965	940	923	716	1,028	-23.8%	11.4%
STAR 3 & 4 (high quality)	344	354	355	276	368	-22.0%	3.7%

Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4+.

TABLE A-7b. Estimated capacity of certificate renewals, by community poverty level, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Poverty Level	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
Highest	28,166	25,855	28,637	20,718	28,959	-19.9%	1.1%
Child care centers	26,063	23,804	26,367	19,291	26,888	-19.0%	2.0%
Child care homes	2,103	2,051	2,270	1,427	2,071	-30.4%	-8.8%
STAR 1 & 2	16,028	16,118	15,135	11,382	16,280	-29.4%	7.6%
STAR 3 & 4 (high quality)	12,138	9,737	13,502	9,336	12,679	-4.1%	-6.1%
Middle high	31,254	32,486	34,390	23,579	35,164	-27.4%	2.3%
Child care centers	28,865	30,261	32,090	22,059	32,815	-27.1%	2.3%
Child care homes	2,389	2,225	2,300	1,520	2,349	-31.7%	2.1%
STAR 1 & 2	19,855	20,878	20,782	13,795	21,239	-33.9%	2.2%
STAR 3 & 4 (high quality)	11,399	11,608	13,608	9,784	13,925	-15.7%	2.3%
Middle low	41,938	44,291	44,150	37,493	45,187	-15.3%	2.3%
Child care centers	39,457	41,920	42,036	35,647	43,080	-15.0%	2.5%
Child care homes	2,481	2,371	2,114	1,846	2,107	-22.1%	-0.3%
STAR 1 & 2	24,531	27,184	26,201	21,709	26,245	-20.1%	0.2%
STAR 3 & 4 (high quality)	17,407	17,107	17,949	15,784	18,942	-7.7%	5.5%
Lowest	100,017	99,401	101,790	80,546	114,923	-19.0%	12.9%
Child care centers	97,343	96,958	99,529	78,782	112,400	-18.7%	12.9%
Child care homes	2,674	2,443	2,261	1,764	2,523	-27.8%	11.6%
STAR 1 & 2	57,616	58,588	57,994	48,108	68,242	-17.9%	17.7%
STAR 3 & 4 (high quality)	42,401	40,813	43,796	32,438	46,681	-20.5%	6.6%

Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4+.

TABLE A-8a. Certificate renewals, by community racial composition, September 2018–February 2021

	TIME PERIOD					% CHANGE	
% White residents	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
Highest	1,140	1,132	1,146	899	1,153	-20.6%	0.6%
Child care centers	719	757	766	605	795	-20.1%	3.8%
Child care homes	421	375	380	294	358	-21.6%	-5.8%
STAR 1 & 2	846	849	831	650	846	-23.4%	1.8%
STAR 3 & 4 (high quality)	294	283	315	249	307	-12.0%	-2.5%
Middle high	951	901	914	711	987	-21.1%	8.0%
Child care centers	678	678	678	540	738	-20.4%	8.8%
Child care homes	273	223	236	171	249	-23.3%	5.5%
STAR 1 & 2	710	635	673	492	733	-22.5%	8.9%
STAR 3 & 4 (high quality)	241	266	241	219	254	-17.7%	5.4%
Middle low	646	607	640	465	665	-23.4%	3.9%
Child care centers	361	367	379	299	397	-18.5%	4.7%
Child care homes	285	240	261	166	268	-30.8%	2.7%
STAR 1 & 2	497	467	489	349	491	-25.3%	0.4%
STAR 3 & 4 (high quality)	149	140	151	116	174	-17.1%	15.2%
Lowest	673	700	708	438	698	-37.4%	-1.4%
Child care centers	391	384	407	250	405	-34.9%	-0.5%
Child care homes	282	316	301	188	293	-40.5%	-2.7%
STAR 1 & 2	579	602	583	358	590	-40.5%	1.2%
STAR 3 & 4 (high quality)	94	98	125	80	108	-18.4%	-13.6%

Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

TABLE A-8b. Estimated capacity of certificate renewals, by community racial composition, September 2018–February 2021

	TIME PERIOD					% CHANGE	
% White residents	Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021	Mar 2019–Mar 2020	Sept 2019–Sept 2020
Highest	67,923	70,483	72,421	59,253	76,639	-15.9%	5.8%
Child care centers	64,571	67,455	69,479	56,854	73,770	-15.7%	6.2%
Child care homes	3,352	3,028	2,942	2,399	2,869	-20.8%	-2.5%
STAR 1 & 2	37,570	42,427	39,463	34,267	43,137	-19.2%	9.3%
STAR 3 & 4 (high quality)	30,353	28,056	32,958	24,986	33,502	-10.9%	1.7%
Middle high	70,084	68,832	70,200	56,244	79,153	-18.3%	12.8%
Child care centers	68,018	67,081	68,438	54,923	77,227	-18.1%	12.8%
Child care homes	2,066	1,751	1,762	1,321	1,926	-24.6%	9.3%
STAR 1 & 2	41,173	38,958	41,484	31,470	49,338	-19.2%	18.9%
STAR 3 & 4 (high quality)	28,911	29,874	28,716	24,774	29,815	-17.1%	3.8%
Middle low	34,407	33,099	35,062	27,700	37,395	-16.3%	6.7%
Child care centers	32,337	31,243	33,164	26,374	35,418	-15.6%	6.8%
Child care homes	2,070	1,856	1,898	1,326	1,977	-28.6%	4.2%
STAR 1 & 2	19,256	19,342	19,068	15,527	18,344	-19.7%	-3.8%
STAR 3 & 4 (high quality)	15,151	13,757	15,994	12,173	19,051	-11.5%	19.1%
Lowest	28,977	29,619	31,284	19,139	31,046	-35.4%	-0.8%
Child care centers	26,818	27,164	28,941	17,628	28,768	-35.1%	-0.6%
Child care homes	2,159	2,455	2,343	1,511	2,278	-38.5%	-2.8%
STAR 1 & 2	20,047	22,041	20,097	13,730	21,187	-37.7%	5.4%
STAR 3 & 4 (high quality)	8,930	7,578	11,187	5,409	9,859	-28.6%	-11.9%

Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

TABLE A-9. ECE provider permanent closures, September 2018–February 2021

	TIME PERIOD					% CHANGE	
	Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021	Mar 2019–Mar 2020	Sept 2019–Sept 2020
Count	346	369	318	280	301	-24.1%	-5.3%
Child care centers	149	203	136	148	153	-27.1%	12.5%
Child care homes	197	166	182	132	148	-20.5%	-18.7%
STAR 1 & 2	319	339	291	251	267	-26.0%	-8.2%
STAR 3 & 4 (high quality)	27	30	27	29	34	-3.3%	25.9%
Estimated capacity	10,654	15,519	9,317	10,701	11,901	-31.0%	27.7%
Child care centers	9,152	14,251	7,931	9,707	10,753	-31.9%	35.6%
Child care homes	1,502	1,268	1,386	994	1,148	-21.6%	-17.2%
STAR 1 & 2	9,412	12,863	7,865	8,565	9,348	-33.4%	18.9%
STAR 3 & 4 (high quality)	1,242	2,656	1,452	2,136	2,553	-19.6%	75.8%

TABLE A-10a. Number of ECE provider permanent closures, by geographic locale, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Locale	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
City	134	127	106	99	117	-22.0%	10.4%
Child care centers	53	66	41	52	52	-21.2%	26.8%
Child care homes	81	61	65	47	65	-23.0%	0.0%
STAR 1 & 2	132	116	100	90	104	-22.4%	4.0%
STAR 3 & 4 (high quality)	2	11	6	9	13	-18.2%	116.7%
Suburb	88	104	96	74	75	-28.8%	-21.9%
Child care centers	42	68	49	42	46	-38.2%	-6.1%
Child care homes	46	36	47	32	29	-11.1%	-38.3%
STAR 1 & 2	81	96	88	65	66	-32.3%	-25.0%
STAR 3 & 4 (high quality)	7	8	8	9	9	12.5%	12.5%
Town/Rural	124	138	116	107	108	-22.5%	-6.9%
Child care centers	54	69	46	54	54	-21.7%	17.4%
Child care homes	70	69	70	53	54	-23.2%	-22.9%
STAR 1 & 2	106	127	103	96	96	-24.4%	-6.8%
STAR 3 & 4 (high quality)	18	11	13	11	12	0.0%	-7.7%

TABLE A-10b. Estimated capacity of permanently closed providers, by geographic locale, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Locale	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
City	3,877	4,991	2,255	2,989	3,710	-40.1%	64.5%
Child care centers	3,274	4,519	1,790	2,642	3,222	-41.5%	80.0%
Child care homes	603	472	465	347	488	-26.5%	4.9%
STAR 1 & 2	3,865	3,747	2,104	2,556	2,961	-31.8%	40.7%
STAR 3 & 4 (high quality)	12	1,244	151	433	749	-65.2%	396.0%
Suburb	3,132	5,342	3,543	4,065	3,748	-23.9%	5.8%
Child care centers	2,767	5,055	3,147	3,826	3,522	-24.3%	11.9%
Child care homes	365	287	396	239	226	-16.7%	-42.9%
STAR 1 & 2	2,622	4,660	2,958	3,170	3,050	-32.0%	3.1%
STAR 3 & 4 (high quality)	510	682	585	895	698	31.2%	19.3%
Town/Rural	3,645	5,186	3,519	3,647	4,396	-29.7%	24.9%
Child care centers	3,111	4,677	2,994	3,239	3,962	-30.7%	32.3%
Child care homes	534	509	525	408	434	-19.8%	-17.3%
STAR 1 & 2	2,925	4,456	2,803	2,839	3,290	-36.3%	17.4%
STAR 3 & 4 (high quality)	720	730	716	808	1,106	10.7%	54.5%

TABLE A-11a. Number of ECE provider permanent closures, by community poverty level, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Poverty Level	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
Highest	63	70	57	59	61	-15.7%	7.0%
Child care centers	22	35	25	29	23	-17.1%	-8.0%
Child care homes	41	35	32	30	38	-14.3%	18.8%
STAR 1 & 2	62	66	52	53	54	-19.7%	3.8%
STAR 3 & 4 (high quality)	1	4	5	6	7	50.0%	40.0%
Middle high	104	87	70	52	67	-40.2%	-4.3%
Child care centers	45	45	28	25	29	-44.4%	3.6%
Child care homes	59	42	42	27	38	-35.7%	-9.5%
STAR 1 & 2	95	79	67	47	60	-40.5%	-10.4%
STAR 3 & 4 (high quality)	9	8	3	5	7	-37.5%	133.3%
Middle low	94	99	81	70	75	-29.3%	-7.4%
Child care centers	41	45	27	38	42	-15.6%	55.6%
Child care homes	53	54	54	32	33	-40.7%	-38.9%
STAR 1 & 2	83	90	74	64	69	-28.9%	-6.8%
STAR 3 & 4 (high quality)	11	9	7	6	6	-33.3%	-14.3%
Lowest	85	112	109	99	97	-11.6%	-11.0%
Child care centers	41	77	55	56	58	-27.3%	5.5%
Child care homes	44	35	54	43	39	22.9%	-27.8%
STAR 1 & 2	79	104	97	87	83	-16.3%	-14.4%
STAR 3 & 4 (high quality)	6	8	12	12	14	50.0%	16.7%

Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4+.

TABLE A-11b. Estimated capacity of permanently closed providers, by community poverty level, September 2018–February 2021

	TIME PERIOD					% CHANGE	
Poverty Level	**Sept 2018–Feb 2019**	**Mar–Aug 2019**	**Sept 2019–Feb 2020**	**Mar–Aug 2020**	**Sept 2020–Feb 2021**	**Mar 2019–Mar 2020**	**Sept 2019–Sept 2020**
Highest	1,876	2,421	1,211	1,675	1,666	-30.8%	37.6%
Child care centers	1,541	2,162	989	1,437	1,383	-33.5%	39.8%
Child care homes	335	259	222	238	283	-8.1%	27.5%
STAR 1 & 2	1,870	1,904	1,139	1,327	1,392	-30.3%	22.2%
STAR 3 & 4 (high quality)	6	517	72	348	274	-32.7%	280.6%
Middle high	2,907	2,859	2,017	1,416	2,192	-50.5%	8.7%
Child care centers	2,454	2,504	1,685	1,228	1,868	-51.0%	10.9%
Child care homes	453	355	332	188	324	-47.0%	-2.4%
STAR 1 & 2	2,364	2,308	1,914	1,218	1,777	-47.2%	-7.2%
STAR 3 & 4 (high quality)	543	551	103	198	415	-64.1%	302.9%
Middle low	2,914	3,380	1,944	2,535	3,145	-25.0%	61.8%
Child care centers	2,512	2,966	1,532	2,271	2,907	-23.4%	89.8%
Child care homes	402	414	412	264	238	-36.2%	-42.2%
STAR 1 & 2	2,642	2,719	1,681	1,990	2,618	-26.8%	55.7%
STAR 3 & 4 (high quality)	272	661	263	545	527	-17.5%	100.4%
Lowest	2,957	6,736	4,095	5,075	4,851	-24.7%	18.5%
Child care centers	2,645	6,496	3,675	4,771	4,548	-26.6%	23.8%
Child care homes	312	240	420	304	303	26.7%	-27.9%
STAR 1 & 2	2,536	5,932	3,081	4,030	3,514	-77.6%	14.1%
STAR 3 & 4 (high quality)	421	804	1,014	1,045	1,337	-56.7%	31.9%

Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4+.

TABLE A-12a. Number of ECE provider permanent closures, by community racial composition, September 2018–February 2021

	TIME PERIOD					% CHANGE	
% White residents	Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021	Mar 2019–Mar 2020	Sept 2019–Sept 2020
Highest	104	128	104	105	95	-18.0%	-8.7%
Child care centers	38	69	39	51	50	-26.1%	28.2%
Child care homes	66	59	65	54	45	-8.5%	-30.8%
STAR 1 & 2	91	120	94	93	82	-22.5%	-12.8%
STAR 3 & 4 (high quality)	13	8	10	12	13	50.0%	30.0%
Middle high	78	71	88	62	73	-12.7%	-17.0%
Child care centers	52	45	47	41	45	-8.9%	-4.3%
Child care homes	26	26	41	21	28	-19.2%	-31.7%
STAR 1 & 2	68	62	80	56	64	-9.7%	-20.0%
STAR 3 & 4 (high quality)	10	9	8	6	9	-33.3%	12.5%
Middle low	82	78	60	58	53	-25.6%	-11.7%
Child care centers	32	43	20	29	23	-32.6%	15.0%
Child care homes	50	35	40	29	30	-17.1%	-25.0%
STAR 1 & 2	80	71	55	50	46	-29.6%	-16.4%
STAR 3 & 4 (high quality)	2	7	5	8	7	14.3%	40.0%
Lowest	82	91	65	55	79	-39.6%	21.5%
Child care centers	27	45	29	27	34	-40.0%	17.2%
Child care homes	55	46	36	28	45	-39.1%	25.0%
STAR 1 & 2	80	86	61	52	74	-39.5%	21.3%
STAR 3 & 4 (high quality)	2	5	4	3	5	-40.0%	25.0%

Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

TABLE A-12b. Estimated capacity of permanently closed providers, by community racial composition, September 2018–February 2021

	TIME PERIOD					% CHANGE	
% White residents	Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021	Mar 2019–Mar 2020	Sept 2019–Sept 2020
Highest	2,722	5,149	3,114	3,833	4,179	-25.6%	34.2%
Child care centers	2,218	4,718	2,613	3,422	3,799	-27.5%	45.4%
Child care homes	504	431	501	411	380	-4.6%	-24.2%
STAR 1 & 2	2,263	4,481	2,555	2,930	3,001	-34.6%	17.5%
STAR 3 & 4 (high quality)	459	668	559	903	1,178	35.2%	110.7%
Middle high	3,347	4,265	3,427	3,561	3,642	-16.5%	6.3%
Child care centers	3,131	4,061	3,100	3,402	3,452	-16.2%	11.4%
Child care homes	216	204	327	159	190	-22.1%	-41.9%
STAR 1 & 2	2,662	3,567	2,778	2,852	2,820	-20.0%	1.5%
STAR 3 & 4 (high quality)	685	698	649	709	822	1.6%	26.7%
Middle low	2,552	3,466	1,331	1,894	1,956	-45.4%	47.0%
Child care centers	2,193	3,197	1,030	1,690	1,725	-47.1%	67.5%
Child care homes	359	269	301	204	231	-24.2%	-23.3%
STAR 1 & 2	2,466	2,784	1,226	1,529	1,521	-45.1%	24.1%
STAR 3 & 4 (high quality)	86	682	105	365	435	-46.5%	314.3%
Lowest	2,033	2,516	1,395	1,413	2,077	-43.8%	48.9%
Child care centers	1,610	2,152	1,138	1,193	1,730	-44.6%	52.0%
Child care homes	423	364	257	220	347	-39.6%	35.0%
STAR 1 & 2	2,021	2,031	1,256	1,254	1,959	-38.3%	56.0%
STAR 3 & 4 (high quality)	12	485	139	159	118	-67.2%	-15.1%

Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+.

TABLE A-13a. Application submissions for new and renewed certificates of compliance, March 2019–February 2021

	TIME PERIOD				
	Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021
Application submissions for new certificates of compliance	367	454	352	300	302
Application submissions that did not result in new certificates	74 (20.2%)	95 (20.9%)	93 (25.6%)	87 (29.0%)	79 (26.2%)
Application submissions for certificate renewal	3,431	3,349	3,435	2,573	3,544
Application submissions that did not result in certificate renewal	11 (0.3%)	9 (0.3%)	27 (0.8%)	47 (1.8%)	41 (1.2%)

TABLE A-13b. Application submissions for new certificates of compliance, by geographic locale, March 2019–February 2021

		TIME PERIOD				
		Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021
City	Application submissions for new certificates of compliance	138	196	157	101	112
	Application submissions that did not result in new certificates	29 (21.0%)	36 (18.4%)	47 (29.9%)	32 (31.7%)	39 (34.8%)
Suburb	Application submissions for new certificates of compliance	108	141	116	94	97
	Application submissions that did not result in new certificates	20 (18.5%)	30 (21.3%)	27 (23.3%)	31 (33.0%)	21 (21.6%)
Rural	Application submissions for new certificates of compliance	121	117	79	105	93
	Application submissions that did not result in new certificates	25 (20.7%)	29 (24.8%)	19 (24.1%)	24 (22.9%)	19 (20.4%)

TABLE A-13c. Application submissions for new certificates of compliance, by community poverty level, March 2019–February 2021

		TIME PERIOD				
		Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021
High poverty	Application submissions for new certificates of compliance	67	98	81	52	44
	Application submissions that did not result in new certificates	12 (17.9%)	14 (14.3%)	27 (33.3%)	16 (30.8%)	14 (31.8%)
Low poverty	Application submissions for new certificates of compliance	99	138	109	118	107
	Application submissions that did not result in new certificates	16 (16.2%)	32 (23.2%)	27 (24.8%)	37 (31.4%)	22 (20.6%)

Note: Community is defined as zip code. Quartiles for community poverty are: Low, 0-26.6%; Middle Low, 26.7-37.1%; Middle High, 37.2-53.3%; High, 53.4+.

TABLE A-13d. Application submissions for new certificates of compliance, by community racial composition, March 2019–February 2021

		TIME PERIOD				
		Sept 2018–Feb 2019	Mar–Aug 2019	Sept 2019–Feb 2020	Mar–Aug 2020	Sept 2020–Feb 2021
Highest % White residents	Application submissions for new certificates of compliance	101	122	71	100	82
	Application submissions that did not result in new certificates	22 (21.8%)	27 (22.1%)	17 (23.9%)	24 (24.0%)	15 (18.3%)
Lowest % White residents	Application submissions for new certificates of compliance	101	116	96	67	72
	Application submissions that did not result in new certificates	18 (17.8%)	18 (15.5%)	34 (35.4%)	22 (32.8%)	26 (36.1%)

Note: Community is defined as zip code. Quartiles for community racial composition (% White residents) are: Lowest, 0-34.7%; Middle low, 34.8-71.6%; Middle high, 71.7-89.0%; Highest, 89.1%+..

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