

# **Child Care Stabilization Base Grants**

## **Descriptive Analysis**

**Final Report** 

2/28/2023



Report Authors: Cody R. Tuttle, MPP; Katie Kotasek; Yuna Loesch; Anita Alur; and Weston Merrick, PhD

For questions, please email: <u>ResultsManagement@state.mn.us</u>

Minnesota Management and Budget (MMB) Impact Evaluation Unit 658 Cedar St. St. Paul, MN 55155 (651) 201-8000 <u>ResultsManagement@state.mn.us</u> <u>https://mn.gov/mmb/</u>

## Contents

Child Care Stabilization Base Grants	1
Descriptive Analysis	1
Contents	3
Executive summary	5
Key findings and implications	5
Acknowledgments	7
About the team	7
Background	8
Introduction	8
Preliminary evidence and outstanding questions	8
Current study and research questions	9
Data and methods	10
Data	10
Compensation analysis	10
Closure analysis	11
Enrollment and capacity analysis	11
Base grant overview	12
Compensation	16
Full study period	16
Analysis of monthly trends	19
Closures	23
Full study period	23
Monthly trends analysis	24
Enrollment	26

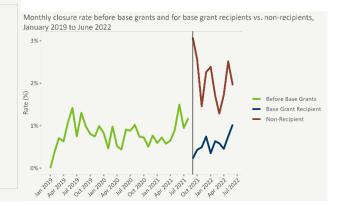
Monthly median enrollment as percent of licensed capacity for recipients	26
Median FTEs	27
Median staff hours	27
Key findings and policy implications	29
Compensation	29
Closure	
Enrollment and capacity	
Policy implications and conclusion	31
Appendix	32
Summary statistics	32
Compensation –study period subgroup analysis	
Median percent change by subgroup	38
Compensation - monthly trends subgroup analysis	44
Share of providers by subgroup	46
Waiver analysis	48
Closures – full grant period subgroup analysis	50
Enrollment	52

## **Executive summary**

Minnesota's Child Care Stabilization Grant Program endeavors to provide child care providers with financial support to maintain operations and increase staff compensation. These grants, funded with federal stimulus funding through the American Rescue Plan Act, began in September 2021 and are available to eligible child care providers through June 2023. This report uses data from the Department of Human Services' Child Development Services (CDS) and the Office of the Inspector General (OIG) to examine three pressing policy questions:

- 1. How did the stabilization base grants affect compensation for staff?
- 2. How did closure rates differ between recipients and non-recipients of the base grants?
- 3. How did providers' enrollment and capacity change after the distribution of the base grants?

# Median compensation dollars per hour (\$) in September 2021 v.s. June 2022



Overall, base grants were associated with a 5.5 percent increase in cumulative monthly compensation per staff hour worked for child care providers. Compensation increases tended to be concentrated in larger, center-based providers in the seven-county Minneapolis-St. Paul metropolitan area. Across the whole study period, family child care providers with staff—about 20 percent of family child care grant recipients—did not report increases in compensation, but this may be due to the way that family child care proprietors think about and report to DHS their own compensation.

Our results also suggest that the base grants may have helped prevent the closure of family child care providers; family child care providers that received the grant had a lower risk of closure than non-recipients (26% of non-recipients closed vs. 5% of recipients). Differences in closures were less pronounced for center-based providers.

We find little evidence that base grants increased enrollment or capacity for providers. While there was enrollment growth over the analysis period (September 2021 through June 2022) for providers, it came

#### Key findings and implications

after reductions going into the school year, meaning it is most likely a return to normal enrollment levels. Additionally, the number of staff and staff hours did not meaningfully change during this period.

Taken together, the base grant program appears to have met many of its policy goals. Providers that participated did, on average, increase compensation and were less likely to close than providers who did not receive the grants. This research is not designed to determine causality or to tell us if the program *caused* these changes. There are likely many factors that impacted both the decision to apply for grants as well as compensation and closures. However, given the stark challenges in ensuring sufficient supply of child care, the findings are notable.

Importantly for future policy, we see that the program had different benefits for different types of providers. Licensed centers and certified centers reported increasing compensation. Family child care providers who employ staff did not show, on average, compensation increases. Receipt of the grant was associated with markedly lower likelihoods of closing for licensed family child care providers. These findings portend a need for any future policies to support the child care market to be designed in a way that accommodates providers' circumstances and the realities of different business models.

## Acknowledgments

We would like to thank our partners at the Minnesota Department of Human Services for their time, expertise, and data assistance over the course of this evaluation. Deb Swenson-Klatt, Jeff Smith, Nolan Fine, Lyn Rhodes, Angela Butel, and Peder Garnaas-Halvorson, along with many others, have been tremendously helpful in all aspects of the project. We also thank our teammates at MMB, Laura Kramer, Kate Getsie, and Jenny Moses for their instrumental help in this project.

## About the team

MMB's Impact Evaluation unit is a team of data and social scientists that rigorously evaluates state investments and policies to find what works and what does not. The legislature established the team in 2019 to assess the impact of the state's response to the opioid epidemic and to study human services grants, broadly. We prioritize working with agencies and partners to identify and answer pressing questions and creating evidence that is rigorous, relevant, and used by policymakers.

For more information or to learn about current and future areas of study, please visit <u>https://osf.io/mzebh/</u> or contact <u>ResultsManagement@state.mn.us</u>.

## Background

#### Introduction

Throughout the COVID-19 pandemic, child care providers faced significant operational challenges, while being directed to continue offering programming, even when other businesses were asked to close during the pandemic. To ensure access to child care for Minnesota families, Minnesota used state and federal funds to prevent closures to support multiple grant programs. Since April 2020, state agencies, or their contractors, have been responsible for administering these grant programs. These programs have served licensed child care centers, certified centers, licensed family child care, and legally non-licensed providers.

While each grant program has had specific guidelines and eligibility requirements, the general purpose of these funds has been to help child care providers remain open during a tumultuous period. All but two of the <u>grant programs</u> concluded by the end of the 2022 calendar year, including the Peacetime Emergency Child Care Grants, COVID-19 Public Health Support Funds for Child Care, <u>One-time</u> Supplemental Stabilization Grants and Child Care Stabilization Transition Grants. As of the writing of this report, the Child Care Stabilization Grant Program provides two types of grants to child care providers -- <u>Child Care Stabilization Base Grants</u> and <u>Financial Hardship Grants</u>. Providers can continue to apply for and receive these funds monthly until June 2023 if they meet their eligibility requirements. Funding for the Child Care Stabilization Grant Program is from the federal American Rescue Plan Act. More information on the Stabilization Grant Program, grant award amounts and requirements can be found at <u>https://mn.gov/dhs/partners-and-providers/grants-rfps/child-care-stabilization/</u>.

#### Preliminary evidence and outstanding questions

A 2022 analysis of DHS licensing data highlighted that recipients of the Peacetime Emergency Child Care Grants, Public Health Support Funds for Child Care, Child Care Stabilization Transition Grants, and Child Care Stabilization Base Grants had lower closure rates than non-recipients. This trend was consistent across family child care programs and child care centers for all three grants.

Based on two surveys, providers in Minnesota seem to have appreciated and benefitted from the various grant programs offered during the pandemic.

In one state-level survey, 35 percent of providers said that they would have closed without the relief funds. Additionally, 56 percent of employees at child care facilities said that they experienced an increase in compensation during this period. While these responses indicate that the grants have been helpful in stabilizing the market, a large share of providers said that they continued to face staffing shortages, leading to longer waitlists for families and reduced operating hours. These providers largely cited low wages as their primary recruitment challenge (State Survey Data: Child Care at a Time of Progress and Peril, 2021).

A separate survey of base grant recipients indicated that 48 percent of provider respondents experienced a COVID-19-related closure after September 2021. Additionally, 47 percent of respondents said that they increased hourly wages, and 45 percent increased bonus pay to meet the base grant's requirements. Overall, almost all providers said that the base grants were helpful in keeping their programs open and operating, as well as retaining staff; however, many continued to experience staffing

shortages and had difficulties attracting new employees (Base Grant Recipient Survey Summary Report, 2022).

These findings suggest that the grants helped providers keep up their operations and increase compensation for their staff. However, there are several limitations with past research that we seek to address in this report. First, these surveys were done early in the implementation of the base grants, meaning that providers' circumstances may have changed since responses were collected. Second, aggregate data on closures may be masking time trends in the data that are important to understanding the extent to which base grants may be associated with differential closure rates. Third, survey data for compensation changes do not address the amount of change. Fourth, none of these data are broken down by important provider characteristics, like geography, race/ethnicity, size, Parent Aware rating, or how long they have been operating.

#### **Current study and research questions**

While past research seems to indicate that the stabilization base grants and other DHS investments in child care are associated with lower rates of closures and increased self-reported compensation for staff, more research is needed to understand the impact of these grants across a wider set of outcomes, time, and provider demographics.

To that end, MMB partnered with DHS to conduct a descriptive analysis of the child care stabilization grants. MMB is instructed by the Minnesota Legislature to partner with DHS and other agencies to evaluate the effectiveness of new and innovative human services grant programs and advise on the design of future policy. Because of the program's universal eligibility, we were unable to identify a suitable comparison group to study, which means that our analysis is unable to make a claim about the causal impact of the program. However, MMB and DHS collaborated to create several research questions that will further our understanding of the impact of the base grants and help inform potential future policy and program changes.

MMB obtained administrative licensing and grant application data from DHS to explore these questions. The questions guiding our study are as follows:

- 1. How did base grants affect compensation for child care workers?
- 2. How did closure rates differ between recipients and non-recipients of the base grants?
- 3. How did childcare providers' enrollment change after the distribution of the base grants?

This analysis builds on prior surveys and research exploring the effect of the base grants on providers by analyzing additional outcomes and disaggregating data along several dimensions, including provider type, demographic characteristics, and time.

## Data and methods

#### Data

Data come from two sources. Our main source is monthly provider applications to the stabilization base grant program from the DHS Office of the Inspector General (OIG) Licensing division. For every application, providers report program and demographic information, enrollment, staff and hours worked, and operational and personnel expenses from the previous month. We also use administrative data on program characteristics from OIG Licensing, which contains information on when a provider opened, changes in operational status since opening, and changes in licensed capacity of how many children they can serve. Our second source is child care provider data obtained from the DHS Child Development Services (CDS) unit, including information on Parent Aware rating and historical voluntarily self-reported enrollment.

In the below section, we describe the data and our methods.

#### **Compensation analysis**

Providers reported personnel hours and expenses monthly in each application. We calculated compensation in dollars per hour as the monthly personnel expenses reported divided by the total number of hours worked for all staff members caring directly for children. This is an analysis of aggregate compensation trends and should not be interpreted with regard to individual provider compliance with grant requirements, which is overseen by DHS.

We include in this section data from all base grant applications that did not request a compensation requirement waiver<sup>1</sup> from all providers that received payment for a grant in at least one month. The analysis is limited to providers that had at least two applications. We also limited our analysis to child care centers and family child care providers with more than one staff member, as providers with only one staff member were not required to report monthly personnel expenses, and we thus do not have data for them. This applies especially to family child care providers applied at least twice and received payment for at least one, only 610 have additional staff. Put more explicitly, because we do not have personnel expense data for sole caregivers, this section of the analysis includes only 20 percent of family child care providers who received a grant payment.

Because of the wide range of compensation reported by providers and the presence of extreme outliers (either due to reporting error or actual high or low values), we used the research best practice of truncating compensation to the 5<sup>th</sup> and 95<sup>th</sup> percentile of the original reported values within a month. For example, if compensation for a provider for one month was higher than 95 percent of other

<sup>&</sup>lt;sup>1</sup> Providers receiving Stabilization Base Grants are required by Minnesota State law to use at least 70 percent of the Base Grant to provide increased compensation, benefits, or premium pay to all staff who regularly care for children. Applicants may request a waiver from this requirement if they cannot comply with this requirement due to restrictions included in agreements with employee bargaining units, or if the program is experiencing unusual and significant financial hardship. Applicants must provide appropriate documentation when requesting waivers for either reason.

providers, we replaced it with the value of the 95<sup>th</sup> percentile. We also calculated aggregate percentage change across providers using median values, instead of means, to mitigate the impact of outliers.

#### **Closure analysis**

We calculate monthly closure rates as the number of providers that experienced a permanent closure, divided by the total number of providers in each month, for both recipients and non-recipients. For the monthly analysis, we define providers as non-recipients in months after the grants started if they have not yet been paid for a grant. We define providers as recipients in the month that they receive a grant and for the rest of the analysis period after.

We calculate cumulative closures for the full grant period as the number of providers that experienced a permanent closure from September 2021 to June 2022 divided by the total number of providers that were operational at any point in that period, for both recipients and non-recipients. For this analysis, we define recipients as providers that ever received a grant and non-recipients as providers that never received a grant.

We defined permanent closure as when a provider was inactive from one point continuously until the end of our data period in June 2022. To model the population of providers that were operational in each month, we removed subsequent month records from providers who had a permanent closure. Providers that were recorded as experiencing a temporary closure (i.e., pending reopening, temporarily suspended but reopened later, etc.) were treated as active if they re-opened in subsequent months.

#### **Enrollment and capacity analysis**

As part of the application for base grants each month, providers report how many children were enrolled full and part time across three age groups in their programs each week for the month prior. The number of children a program can serve varies widely across provider types, so we measure enrollment as a percentage of licensed capacity rather than as a total number.

Providers do not report how many hours each child attends each week, but do report how many children are enrolled full and less than full time, except for certified child care centers which only report a total enrollment figure. To model a provider's total weekly enrollment, we multiply the number of part-time children enrolled by 0.5 and sum the weighted number of part-time and full-time children enrolled across all age groups. As with the compensation data, we truncate any extreme enrollment values at the 95<sup>th</sup> percentile value. We also truncate enrollment percentage of capacity at 250 percent; for any providers that have a reported enrollment as 2.5 times licensed capacity or more, we set it to the median value. We analyze enrollment percentage of licensed capacity for all providers throughout the period we have data for, as well as by provider type, geography, race/ethnicity of the program administrator completing the application, Parent Aware Rating, licensed capacity for licensed entities, and length of license or certification.

We also assess the number of FTE staff and number of staff hours worked as dimensions of provider capacity.

For more information on methods, please email <u>ResultsManagement@state.mn.us</u>.

## **Base grant overview**

In this section, we provide an overview of the providers that applied for base grants. This includes the share of eligible providers that applied for base grants by round and provider type from September 2021 to June 2022, as well as a table of characteristics of providers that never applied for the grants, applied at least once but were never paid (i.e., they were determined to be ineligible), and received a grant at least once. We also explore the share of eligible providers that applied for grants by county. Please refer to the appendix for additional data on the number of eligible providers, the number of applicants, and the number awarded a grant for each round by provider type, as well as a graph of participation numbers and rates for all counties.

#### Figure 1

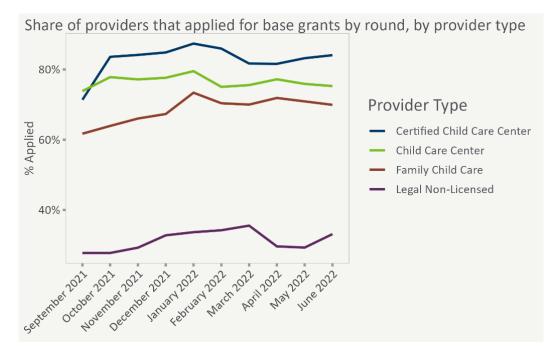


Figure 1 shows that application rates were consistently above 60 percent for family child care and center-based providers and typically above 70 percent in the later rounds. Center-based providers had higher application rates than family child care, with certified centers having the highest rates at around 80 percent. Legal non-licensed providers have lower application rates than other provider types, between 35 percent and 40 percent. For context, in any given month, there were approximately 560 certified child centers, 1,800 licensed child care centers, 6,700 family child care providers, and 180 legal non-licensed providers that were eligible to apply for the grants. For more data on how many providers were eligible to apply, applied, and were awarded a base grant by round and provider type, please see the first section in the appendix.

12

#### Table 1

Characteristics of Providers by Ever Applied/Ever Paid for Grant			
Characteristic	Never Applied, N = 1,9227	Ever Applied/Never Paid, N = 4777	Ever Paid, N = 7,5037
Provider Type			
Certified Child Care Center	47 (2.7%)	65 (14%)	487 (6.6%)
Child Care Center	211 (12%)	147 (31%)	1,499 (20%)
Family Child Care	1,510 (85%)	256 (55%)	5,399 (73%)
Unknown	154	9	118
Region			
Greater MN	1,137 (64%)	277 (59%)	4,253 (58%)
Metro	631 (36%)	191 (41%)	3,132 (42%)
Unknown	154	9	118
Number of FTEs			
0-1	0 (NA%)	459 (98%)	5,276 (71%)
1-2	0 (NA%)	0 (0%)	467 (6.3%)
2-5	0 (NA%)	2 (0.4%)	419 (5.7%)
5-10	0 (NA%)	1 (0.2%)	431 (5.8%)
10-20	0 (NA%)	6 (1.3%)	569 (7.7%)
20+	0 (NA%)	0 (0%)	221 (3.0%)
Unknown	1,922	9	120
Race of Provider Applicant(s)			
American Indian or Alaska Native	0 (NA%)	0 (0%)	10 (0.1%)
Asian/Pacific Islander	0 (NA%)	2 (0.4%)	307 (4.2%)
Black or African American	0 (NA%)	4 (0.9%)	142 (1.9%)
Hispanic	0 (NA%)	0 (0%)	241 (3.3%)
Multiple	0 (NA%)	0 (0%)	268 (3.6%)
Prefer not to answer	0 (NA%)	423 (90%)	436 (5.9%)
White	0 (NA%)	39 (8.3%)	5,981 (81%)
Unknown	1,922	9	118

#### Parent Aware Rating

Not Rated	1,773 (92%)	401 (84%)	6,335 (84%)
One-Star	21 (1.1%)	5 (1.0%)	144 (1.9%)
Two-Star	29 (1.5%)	6 (1.3%)	213 (2.8%)
Three-Star	31 (1.6%)	13 (2.7%)	284 (3.8%)
Four-Star	68 (3.5%)	52 (11%)	527 (7.0%)
Capacity			
1-5	5 (0.3%)	1 (0.2%)	12 (0.2%)
6-10	560 (32%)	92 (20%)	1,380 (19%)
11-20	1,016 (57%)	229 (49%)	4,094 (55%)
21-100	116 (6.6%)	71 (15%)	905 (12%)
100+	24 (1.4%)	10 (2.1%)	507 (6.9%)
Unlimited	47 (2.7%)	65 (14%)	487 (6.6%)
Unknown	154	9	118
ength of License			
0-3	480 (27%)	145 (31%)	2,059 (28%)
4-5	149 (8.4%)	27 (5.8%)	698 (9.5%)
6-10	273 (15%)	58 (12%)	1,074 (15%)
11-20	349 (20%)	70 (15%)	1,461 (20%)
21+	517 (29%)	168 (36%)	2,093 (28%)
Unknown	154	9	118
n (%)			

Table 1<sup>2</sup> shows several key differences among providers that never applied for base grants, applied but were never paid, and were paid at least once. One notable difference is that providers that never applied for base grants are disproportionately family child care providers; 85 percent of providers who did not apply are family child care providers, compared to 73 percent of providers who were paid at least once. Additionally, providers that were never paid are disproportionately located in Greater MN; 64 percent of providers that did not apply were in Greater MN, compared to 58 percent of providers that were paid at least once.

<sup>&</sup>lt;sup>2</sup> "Unknown" categories include tribally licensed and legally non-licensed providers, for whom DHS Licensing does not collect administrative data.



Figure 2

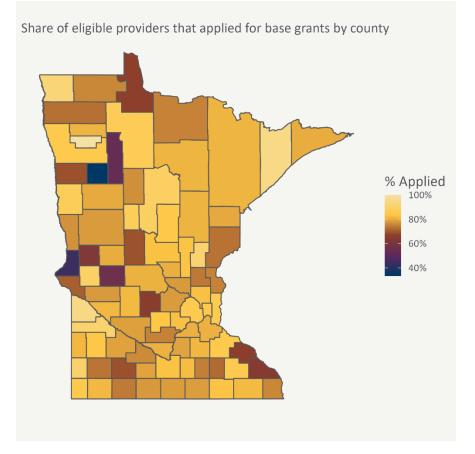


Figure 2 shows that while a majority of counties hover around the 80 percent mark for the share of eligible providers that applied for grants, some exhibit substantially lower rates. Specifically, Traverse, Mahnomen, and Clearwater counties all have stabilization grant participation rates near 40-50 percent. Seven counties had application rates higher than 90 percent: Red Lake, Lake, Lac Qui Parle, Kittson, Yellow Medicine, Kanabec, and Pipestone. DHS and MMB are pursuing additional research to understand why providers may not have taken up the grants with findings available in 2023. Please note that the counties with the lowest and highest participation rates likely have low numbers of eligible providers. For specific data on the number of eligible providers and the number of providers who applied for grants by county, see the appendix.

15

## Compensation

The base grant program seeks to stabilize the child care market by requiring providers to increase compensation, benefits, or premium pay for all staff regularly caring for children. While 70 percent of the base grants were required to go towards these increases, there were few requirements on how or when providers spent these funds. To better understand how providers met these requirements, we analyzed compensation changes for the whole study period and month-to-month. In both cases, we explored the data for all providers, as well as by provider type, reported race/ethnicity of the person applying, geography, number of full-time employees (FTEs), and Parent Aware rating. We included a separate analysis for providers that received a waiver from the requirement to use at least 70 percent of the grant to increase compensation.

#### Full study period



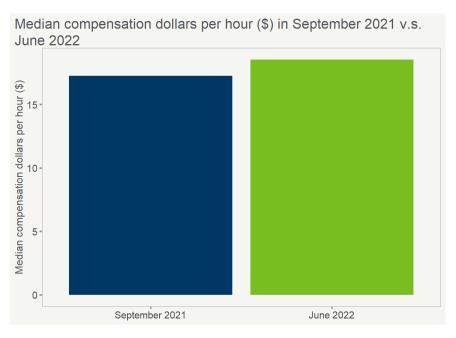


Figure 3 shows that the median compensation in dollars was around 5.5 percent higher in June 2022 (\$18.50 per hour) than it was in September 2021 when the base grants started (\$17.30 per hour).



Figure 4

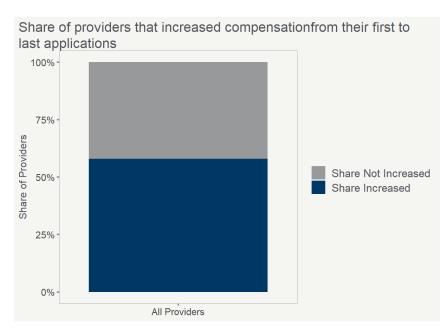
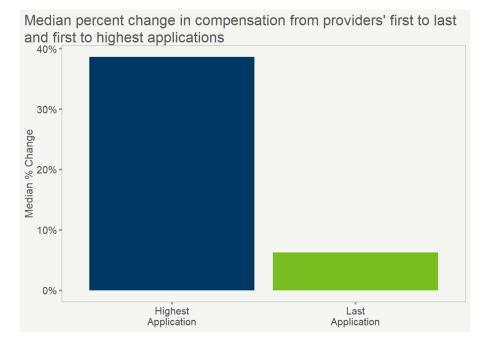


Figure 4 shows that the majority of providers (roughly 60 percent) increased compensation in their last application relative to their first. This is another indicator that the base grants may have helped most providers achieve sustained compensation increases; however, several providers only had temporary increases during the analysis period. Statute did not prescribe the degree to which compensation must be increased or the time period during which increases must be provided. Providers could have increased compensation in earlier months—for instance, through bonuses—but returned to baseline levels by the last month of the study period.

Figure 5



The green bar in figure 5 shows a small net increase between providers' first and last application of around 5 percent. Also, there was a nearly 40 percent increase between providers' first and highest application, suggesting that providers may have used bonuses and temporary compensation increases to boost compensation instead of permanent wage increases. This is borne out in the base grant recipient survey from June 2022, where providers indicated that bonuses and wage increases were the two most common mechanisms of increasing compensation.

Figure 6

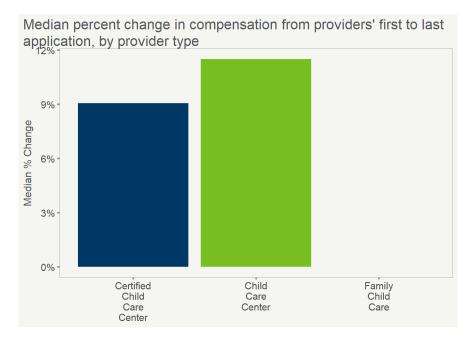


Figure 6 illustrates that child care centers experienced the largest net increase in compensation of almost 12 percent, while certified centers increased compensation by 9 percent. Family child care providers who employ at least one additional staff showed, on average, no net change in compensation from their first to last applications. The data shows there is wide variation between providers in these categories, with some providers having net decreases, some having net increases, and a majority of providers showing small or no changes. This could be because licensed family child care providers have a wide variety of business structures and some result in significant variability in compensation from month to month. It is also possible that family child care providers were more likely to use one-time bonuses that were not sustained until the last application.

Analysis of monthly trends

Figure 7

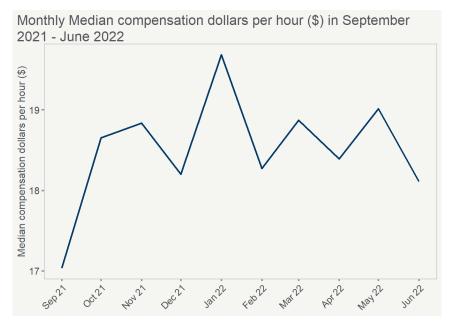


Figure 7 shows the median compensation across all providers by month in dollars per hour, indicating that average compensation increased from September to October 2021 and stayed higher through June 2022 despite small monthly fluctuations. Another temporary spike in January 2022 to almost 20 dollars an hour may be indicative of a quarterly or holiday bonus.

Figure 8

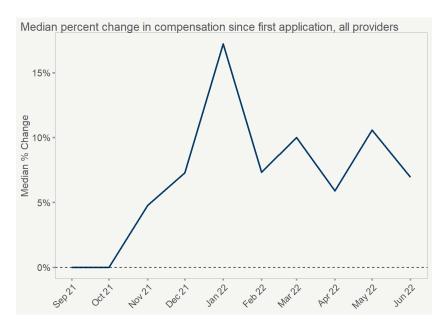


Figure 8 indicates that while aggregate compensation levels may have increased from September to October 2021, the average provider did not increase compensation. This may mean that a smaller number of providers increased compensation enough to create a spike in aggregate compensation

levels, but a typical provider did not increase compensation at all between September to October. Trends in median change since first application mirror overall trends in median compensation levels, with a peak in January and consistent increases of 5 to 10 percent until June 2022.

#### Figure 9

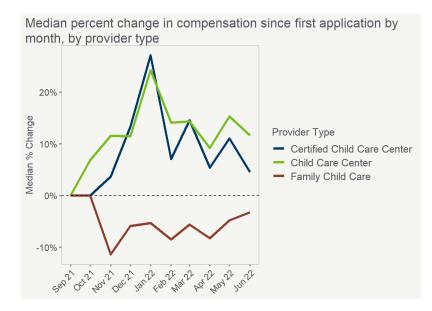


Figure 9 shows that while the average center-based provider had consistently higher compensation in the months after their first application, the average family child care provider who had an employee had substantial decreases in compensation month-to-month after their first application. The median family child care provider who had an employee had compensation around 5 percent and up to 10 percent lower than the month of the first application in the months following. In contrast, center-based providers experienced consistently higher compensation in the months following their first application, around 5 to 10 percent in most months.

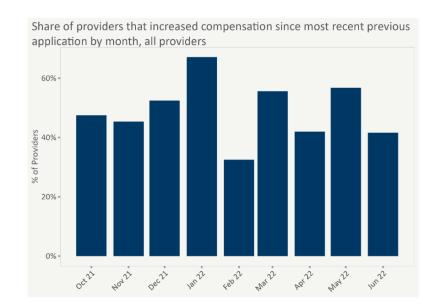


Figure 10

Figure 10 shows the share of providers that increased compensation relative to the most recent previous application by month for all providers. During most months, an average of 45-50 percent of providers increased compensation. Similar to the previous graph, the share peaks in January 2022 to around 65 percent, and decreases to its lowest level the next month, oscillating between 55 and 40 percent in the following months until June 2022. As shown in the previous graph, the January spike may reflect end-of-year bonuses.



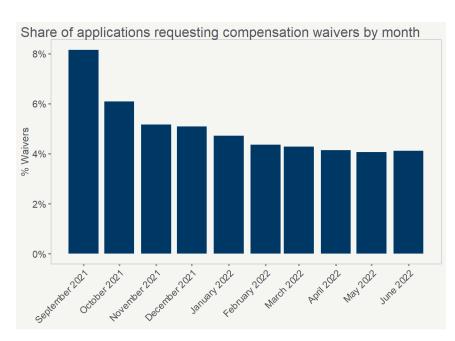


Figure 11 illustrates that the share of applicants requesting a waiver was highest when the grant program began in September 2021, with around 8 percent of providers requesting waivers. The high waiver request rate in September is most likely due to a miscommunication about waiver eligibility. DHS sent new guidance in October to correct this. After, rates dropped gradually until June 2022, when around 4 percent requested waivers. Almost 90 percent of providers did not request waivers.

Table 2

#### Characteristics of providers that requested waivers vs. never requested waviers

Characteristic	Never Requested Waiver, N = 6,944 <sup>1</sup>	Requested Waiver, N = 907
Provider Type		
Certified Child Care Center	333 (4.8%)	219 (24%)
Child Care Center	1,327 <b>(</b> 19%)	319 (35%)
Family Child Care	5,284 (76%)	369 <b>(</b> 41% <b>)</b>
Region		
Greater MN	4,101 (59%)	427 (47%)
Metro	2,843 (41%)	480 <b>(</b> 53% <b>)</b>
Number of FTEs		
0-1	5,273 (76%)	462 <b>(</b> 51%)
1-2	406 (5.8%)	61 (6.7%)
2-5	297 (4.3%)	124 (14%)
5-10	302 (4.3%)	130 (14%)
10-20	466 (6.7%)	109 (12%)
20+	200 (2.9%)	21 (2.3%)
ace of Provider Applicant(s)		
American Indian or Alaska Native	10 (0.1%)	0 (0%)
Asian	224 (3.2%)	83 (9.2%)
Black or African American	118 (1.7%)	28 (3.1%)
Hispanic	174 (2.5%)	67 (7.4%)
Multiple	192 (2.8%)	76 (8.4%)
Native Hawaiian or Other Pacific Islander	2 (<0.1%)	0 (0%)
Prefer not to answer	824 (12%)	33 (3.6%)
White	5,400 (78%)	620 (68%)
arent Aware Rating		
Not Rated	5,854 (84%)	753 (83%)
Dne-Star	134 (1.9%)	15 (1.7%)
Гwo-Star	190 (2.7%)	29 (3.2%)
Three-Star	270 (3.9%)	27 (3.0%)
Four-Star	496 (7.1%)	83 (9.2%)
 1 (%)	······	x/

Table 2 shows that there were several key differences between providers that did and did not request compensation waivers. Specifically, providers of color, child care centers, certified centers, mid-sized providers, and metro providers were more likely to request waivers.

## Closures

One of the federal goals of base grants is to stabilize the child care market by helping providers stay operational. We sought to understand whether recipients of the grants were more likely to stay open than non-recipients. We explored this issue in two ways. First, we incorporated data from the pre-grant period from January 2019 through the most current grant round in June 2022 to contextualize monthly closure rates for grantees versus non-grantees. Second, we assessed cumulative closure rates for grant recipients during the full grant period, including breakdowns by provider characteristics.

#### **Full study period**

#### Figure 12

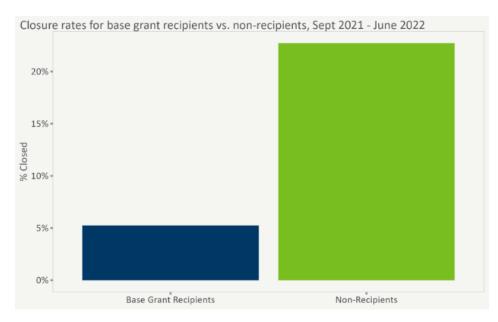


Figure 12 shows that over 20 percent of non-base grant recipients closed from September 2021 to June 2022, compared to 5 percent of base grant recipients.

Figure 13

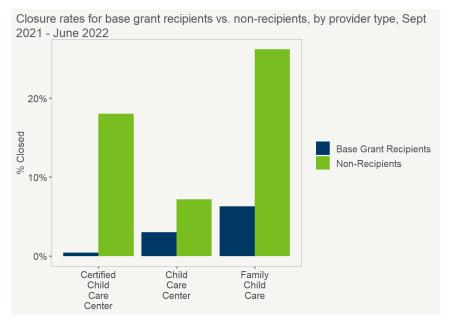


Figure 13 suggests that while base grant recipients closed at lower rates than non-recipients for all provider types, the difference was especially stark for certified centers. Amongst certified centers, almost 20 percent of non-recipients closed, compared to only 1 percent of recipients. The difference in closure rates between recipients and non-recipients was significantly less pronounced for centers.

#### Monthly trends analysis

Figure 14

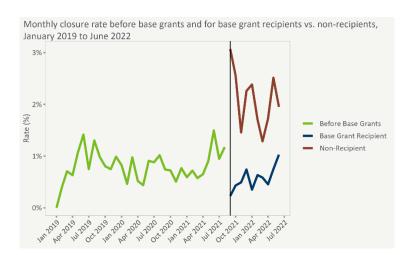


Figure 14 shows stable monthly closure rates between 0.5 and 1.5 percent from the beginning of 2019 until base grants started in September 2021. From there, closure rates for non-recipients were consistently higher than for recipients; between 1.5 and 3 percent of non-recipients closed in a given month, compared to 1 percent or fewer recipients. This may indicate that the base grants were protective against closure from the month they started rather than their impact building over time. We

cannot, however, say that grants caused reductions in closure rates, as child care providers that did not accept the grant may have been different in ways correlated with the likelihood to close.

#### Figure 15

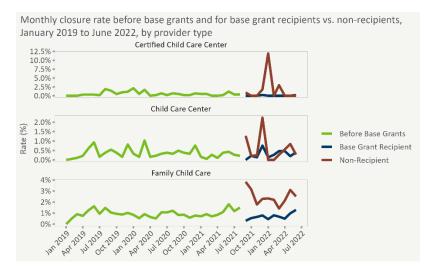
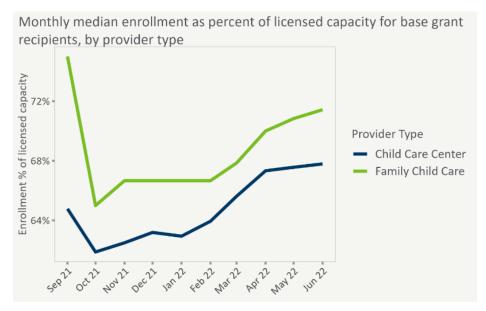


Figure 15 shows family child care providers drove the overall monthly trend for closures, with differing trends for center-based providers. From the month base grants started, non-recipient family child care providers were consistently more likely to close than recipients until June 2022. At this point, between 1.5 and 4 percent of non-recipients closed per month, compared to less than 1 percent of recipients. The monthly effect was less consistent for licensed and certified centers. Amongst these providers, a disproportionate share of non-recipients closed in January 2022, and the differences between recipients and non-recipient certified centers closed in January 2022, compared to less than 2.5 percent in every other month of base grants. According to DHS Licensing, it is common for center licenses and certifications to be timed specifically. This may explain the higher January 2022 closure rates for center-based provider non-recipients; it is possible that if providers knew they were scheduled to close in January they may have intentionally decided not to apply for base grants.

## Enrollment

#### **Monthly median enrollment as percent of licensed capacity for recipients** *Figure 16*



For programs with licensed capacity information, an analysis to show the median enrollment as a proportion of licensed capacity was completed by provider type. Both program types with licensed capacity information show a decrease from September 2021 to October and then start to show gradual regains, with some significant increases from February 2022 to April 2022. Family child care providers experienced a greater enrollment reduction (75 percent to 65 percent of licensed capacity) in September than child care centers (65 percent to 60 percent) and did not regain enrollment as quickly or completely as child care centers. The reduction in enrollment in September could be due to children aging out of child care and starting preschool or school, or could be part of a broader trend of decreasing enrollment. Certified centers are not included here because they are legally unlicensed and do not have a licensed capacity.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> The Minnesota Department of Human Services has the authority to certify **license exempt centers**. When a license exempt center is certified, it means that the center meets the federal requirements for receiving child care assistance. To be registered for CCAP, a license exempt center must be certified.

#### **Median FTEs**

Figure 17

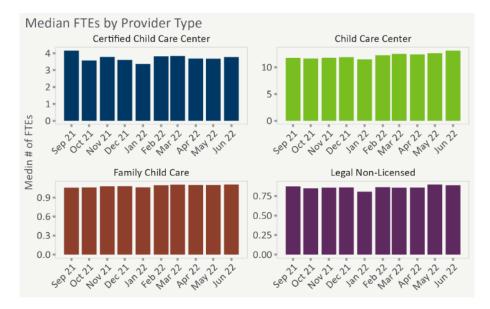
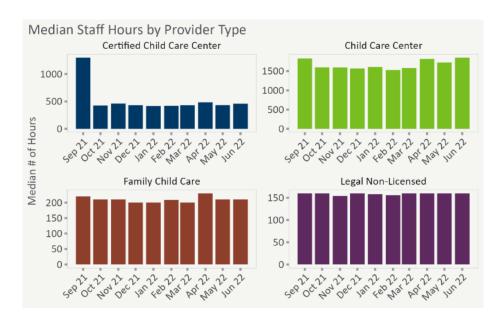


Figure 17 above shows fairly consistent levels of staff FTEs for all providers. The median FTE level for family child care providers was around one for the entire period. It hovers between three and four FTEs for certified centers, and it increases slightly from around 12 to 14 FTEs throughout the period for licensed centers.

### Median staff hours

Figure 18



The above figure shows steady median staff hours for family child care and licensed child care centers from September 2021 to June 2022, with small declines and increases but consistent levels around 200

hours for family child care and 1,500 hours for licensed centers. Certified centers saw a large reduction in median staff hours from September to October 2021, from around 1,200 to less than 500, and held steady at around 500 staff hours until June 2022. The large decrease for certified centers is most likely due to reducing program hours from a high during the summer months (preceding September 2021) to program hours needed during the school year.

## Key findings and policy implications

#### Compensation

Our data indicate that base grants were associated with modest increases in compensation. During the study period from September 2021 to June 2022, there was a 5 percent increase in compensation across all types of providers, and approximately 60 percent of providers reported a net increase between their first and last applications. However, there were differences across providers by type and amounts. Larger providers, centers and certified centers, providers in the metro, and programs with a Three- or Four-Star Parent Aware Rating Level were more likely to increase compensation and typically had larger increases than their counterparts. Larger center-based providers and Parent Aware rated programs are more likely to be located in the metro area, so these findings are consistent. Family child care providers with additional staff had no change in net compensation from their first to last applications.

From month-to-month, compensation fluctuated widely after the grants started. Across all providers, compensation peaked in January 2022, perhaps reflecting quarterly or holiday bonuses. Similar to previous findings, larger providers, centers and certified centers, and metro providers tended to have larger monthly increases in compensation than smaller providers. These providers were also more likely to increase compensation during the first month of the grant program without subsequent decreases, indicating longer-term increases in compensation and potentially higher wages.

Our findings demonstrate that base grants were associated with increases in compensation amongst most child care providers, but the overall increase was relatively modest over the study period. The increases were concentrated in larger center-based providers in the metro, that were more likely to increase compensation and had larger increases in magnitude. This may suggest that these providers' most pressing financial needs were related to personnel expenses, which aligns with findings from previous research (Workman, 2021). Family child care providers with additional staff saw no net change in compensation across the study period and decreases month-to-month. Importantly, the way these providers think of compensation and report it, along with their business structure and function, make personnel expenses subject to more volatility than center-based providers. This may help explain the fluctuations and sometimes even decreases in measured compensation. This section includes only family child care with additional staff, around 20 percent of eligible family child care providers.

Finally, these findings appear to indicate that, on the whole, base grants are associated with increased compensation. As we noted previously, however, it is not possible to know whether these changes are caused by the grants without a valid comparison group. Given this was a universal-eligibility, broadly adopted program, we are unable to identify a valid comparison. It is possible that center-based providers that did not receive the grants increased compensation over the study period similarly to recipients, or alternatively, that family child care providers that did not receive grants showed even more volatility in compensation than family child care providers who did receive them.

#### Closure

As a whole, our analysis indicates that base grants are associated with increased likelihood of keeping child care providers operational, especially for family child care providers. Across the entire study period, around 22 percent of all providers that never received a base grant payment closed, compared to 5 percent who received payment for at least one month. This difference was especially pronounced amongst family child care providers, where around a quarter of non-recipients closed, compared to only 6 percent of recipients. The difference in closure rates between recipients and non-recipients was less stark for child care centers; less than 10 percent of non-recipient licensed centers closed, compared to around 4 percent of recipients.

Analysis of monthly trends indicates that closure rates are substantially higher for non-recipients than for recipients from month-to-month for family child care providers. These findings demonstrate that the base grants may have had a protective effect against closure for family child care providers but less so for centers. However, for center-based providers, closure rates for non-recipients spiked in just one month relative to recipients and were similar to recipients in other months. The one-month spike in closures for non-recipient licensed and certified centers comprise the bulk of cumulative closures for non-recipients; rates were more similar for recipients and non-recipients in other months.

There could be other explanations for higher closure rates for non-recipients other than base grants. There are likely many factors that are correlated with both staying operational and receiving a grant. One such explanation could be related to self-selection for the grant applications. Providers who were in tenuous operational circumstances may have known that base grants would not help them stay open and thus chose not to apply for base grants, whereas providers who were more financially stable and able to stay open may have applied for the grants to increase compensation for their staff or fund other operational areas. This rollout and design of this program means research is only able to identify correlations, and not causation. With better data from other states, there may be the opportunity for future researchers to compare Minnesota's experience with similar states that did not implement this grant program.

#### **Enrollment and capacity**

Our findings show that median enrollment grew for licensed child care centers and family child care after a substantial reduction at the start of the base grant period. They also indicate no notable changes in median FTEs or hours worked. There are small fluctuations throughout the grant period, but no meaningful trends.

The reduction in enrollment came in the transition from summer to the fall, which may indicate that children were aging out of child care and starting school. If this explanation is correct, it may follow that the subsequent growth is due to providers taking in new children to return to their normal enrollment levels. There is a possibility that base grants could have aided these providers in their ability to enroll more children, but it is impossible to know without a valid comparison group that did not receive base grants and for which we do not have reliable enrollment data.

#### **Policy implications and conclusion**

Our results show that the base grant stabilization program was associated with an increase in compensation and a decrease in closures during our study period from September 2021 to June 2022. These impacts differ in important ways across providers. Center-based providers were more likely to increase compensation during the study period than family child care providers and had larger increases. However, family child care grant recipients were much less likely to close than non-recipients, while the effect for centers was much weaker. There were also noticeable differences in compensation changes and closure rates across provider subgroups, including provider size, geographic location, and Parent Aware rating. More detailed information on subgroup analysis can be found in the appendix.

Overall, the findings suggest that any future policy and programming should be flexible to allow different providers to meet different operational needs. Specifically, child care centers seem to be more responsive to increasing compensation, while family child care providers were less likely to close after receiving grants. Further consideration should be given to flexibility needed for different operational models between provider types. These are vastly different models of care that require tailored policy approaches.

Our analysis also suggests that there is a swath of providers who are eligible to receive base grants but have not applied. While participation is high overall at nearly 80 percent for all providers, this varies by type and geography. More targeted or intensive outreach may be helpful to get a wider array of providers to participate and take advantage of this program or future funding streams. DHS and MMB are engaging in future research to understand how to best conduct outreach to providers.



## Appendix

The following section includes additional figures and subgroup analyses for each of the key research questions.

#### **Summary statistics**

Table 3

Stabilization ba	se grant take-up b	y round, by pi	rovider type
Month	# Eligible Providers	# Applied (%)	# Paid (%)
Certified Child Care	e Center		
September 2021	573	409 (71.4%)	145 (25.3%)
October 2021	573	479 (83.6%)	442 (77.1%)
November 2021	574	483 (84.1%)	448 (78.0%)
December 2021	574	487 (84.8%)	454 (79.1%)
January 2022	554	484 (87.4%)	452 (81.6%)
February 2022	555	477 (85.9%)	444 (80.0%)
March 2022	557	455 (81.7%)	433 (77.7%)
April 2022	560	457 (81.6%)	435 (77.7%)
May 2022	560	466 (83.2%)	442 (78.9%)
June 2022	565	475 (84.1%)	440 (77.9%)
Child Care Center			
September 2021	1805	1333 (73.9%)	1109 (61.4%)
October 2021	1804	1404 (77.8%)	1297 (71.9%)
November 2021	1805	1393 (77.2%)	1309 (72.5%)
December 2021	1798	1396 (77.6%)	1323 (73.6%)
January 2022	1797	1429 (79.5%)	1308 (72.8%)
February 2022	1799	1350 (75.0%)	1303 (72.4%)
March 2022	1796	1357 (75.6%)	1300 (72.4%)
April 2022	1790	1382 (77.2%)	1322 (73.9%)
May 2022	1792	1360 (75.9%)	1307 (72.9%)
June 2022	1780	1340 (75.3%)	1257 (70.6%)

Family Child Care			
September 2021	6837	4220 (61.7%)	3975 (58.1%)
October 2021	6760	4322 (63.9%)	4181 (61.8%)
November 2021	6729	4444 (66.0%)	4345 (64.6%)
December 2021	6690	4504 (67.3%)	4412 (65.9%)
January 2022	6652	4882 (73.4%)	4612 (69.3%)
February 2022	6616	4657 (70.4%)	4572 (69.1%)
March 2022	6592	4615 (70.0%)	4544 (68.9%)
April 2022	6571	4724 (71.9%)	4653 (70.8%)
May 2022	6551	4646 (70.9%)	4582 (69.9%)
June 2022	6476	4529 (69.9%)	4475 (69.1%)
Legal Non-Licensed			
Legal Non-Licensed September 2021	180	50 (27.8%)	48 (26.7%)
	180 180	50 (27.8%) 50 (27.8%)	48 (26.7%) 46 (25.6%)
September 2021			
September 2021 October 2021	180	50 (27.8%)	46 (25.6%)
September 2021 October 2021 November 2021	180 181	50 (27.8%) 53 (29.3%)	46 (25.6%) 51 (28.2%)
September 2021 October 2021 November 2021 December 2021	180 181 186	50 (27.8%) 53 (29.3%) 61 (32.8%)	46 (25.6%) 51 (28.2%) 57 (30.6%)
September 2021 October 2021 November 2021 December 2021 January 2022	180 181 186 187	50 (27.8%) 53 (29.3%) 61 (32.8%) 63 (33.7%)	46 (25.6%) 51 (28.2%) 57 (30.6%) 56 (29.9%)
September 2021 October 2021 November 2021 December 2021 January 2022 February 2022	180 181 186 187 184	50 (27.8%) 53 (29.3%) 61 (32.8%) 63 (33.7%) 63 (34.2%)	46 (25.6%) 51 (28.2%) 57 (30.6%) 56 (29.9%) 61 (33.2%)
September 2021 October 2021 November 2021 December 2021 January 2022 February 2022 March 2022	180 181 186 187 184 180	50 (27.8%) 53 (29.3%) 61 (32.8%) 63 (33.7%) 63 (34.2%) 64 (35.6%)	46 (25.6%) 51 (28.2%) 57 (30.6%) 56 (29.9%) 61 (33.2%) 59 (32.8%)

Table 4

Pro	ovider Participation	by County	
County	# of Eligible Providers	# Applied (%)	# Paid (%)
Red Lake	9	9 <b>(</b> 100.0%)	9 (100.0%)
Lake	19	18 (94.7%)	16 (84.2%)
Lac Qui Parle	18	17 (94.4%)	17 (94.4%)
Kittson	13	12 (92.3%)	12 (92.3%)
Yellow Medicine	33	30 (90.9%)	28 (84.8%)
Kanabec	32	29 (90.6%)	27 (84.4%)
Pipestone	31	28 (90.3%)	27 (87.1%)
Stevens	18	16 (88.9%)	13 (72.2%)
Cass	35	31 (88.6%)	31 (88.6%)
Wadena	23	20 (87.0%)	18 (78.3%)
Clay	153	133 (86.9%)	125 (81.7%)
Beltrami	96	83 (86.5%)	77 (80.2%)
Washington	352	301 (85.5%)	281 (79.8%)
Hennepin	1215	1034 (85.1%)	989 (81.4%)
Olmsted	349	297 (85.1%)	284 (81.4%)
Ramsey	457	388 (84.9%)	358 (78.3%)
Goodhue	86	73 (84.9%)	68 (79.1%)
Rock	33	28 (84.8%)	27 (81.8%)
Polk	85	72 (84.7%)	68 (80.0%)
Crow Wing	95	80 (84.2%)	73 (76.8%)
McLeod	91	76 (83.5%)	72 (79.1%)
Lyon	96	80 (83.3%)	76 (79.2%)

Mille Lacs	41	34 (82.9%)	32 (78.0%)
Mower	76	63 (82.9%)	63 (82.9%)
Blue Earth	122	101 (82.8%)	97 (79.5%)
Morrison	86	71 (82.6%)	63 (73.3%)
Anoka	498	411 (82.5%)	393 (78.9%)
Carver	143	118 (82.5%)	104 (72.7%)
Waseca	39	32 (82.1%)	31 (79.5%)
Fillmore	33	27 (81.8%)	24 (72.7%)
Kandiyohi	82	67 (81.7%)	65 (79.3%)
Chippewa	27	22 (81.5%)	21 (77.8%)
Nobles	43	35 (81.4%)	34 (79.1%)
Lincoln	16	13 (81.2%)	13 (81.2%)
Rice	112	91 (81.2%)	91 (81.2%)
Itasca	74	60 (81.1%)	58 (78.4%)
St. Louis	222	180 (81.1%)	159 (71.6%)
Pennington	42	34 (81.0%)	33 (78.6%)
Aitkin	21	17 (81.0%)	15 (71.4%)
Stearns	342	276 (80.7%)	260 (76.0%)
Dakota	641	517 (80.7%)	493 (76.9%)
Nicollet	67	54 (80.6%)	50 (74.6%)
Scott	267	215 (80.5%)	197 (73.8%)
Benton	122	98 (80.3%)	94 (77.0%)
Cook	5	4 (80.0%)	4 (80.0%)

Douglas	110	88 (80.0%)	83 (75.5%)
Becker	74	59 (79.7%)	56 (75.7%)
Carlton	59	47 (79.7%)	45 (76.3%)
Watonwan	19	15 (78.9%)	14 (73.7%)
Le Sueur	71	56 (78.9%)	51 (71.8%)
Redwood	52	41 (78.8%)	40 (76.9%)
Renville	28	22 (78.6%)	22 (78.6%)
Freeborn	55	43 (78.2%)	42 (76.4%)
Faribault	32	25 (78.1%)	24 (75.0%)
Wright	262	204 (77.9%)	186 (71.0%)
Otter Tail	140	109 (77.9%)	105 (75.0%)
Swift	27	21 (77.8%)	21 (77.8%)
Sherburne	193	150 (77.7%)	141 (73.1%)
Martin	58	45 (77.6%)	42 (72.4%)
Wilkin	13	10 (76.9%)	9 (69.2%)
Hubbard	47	36 (76.6%)	34 (72.3%)
Brown	83	63 (75.9%)	58 (69.9%)
Houston	45	34 (75.6%)	31 (68.9%)
Roseau	49	37 (75.5%)	35 (71.4%)
Koochiching	20	15 (75.0%)	15 (75.0%)
Chisago	72	54 (75.0%)	52 (72.2%)
Sibley	36	27 (75.0%)	25 (69.4%)
Steele	102	76 (74.5%)	72 (70.6%)

Jackson	23	17 (73.9%)	15 (65.2%)
Isanti	42	31 (73.8%)	30 (71.4%)
Murray	15	11 (73.3%)	11 (73.3%)
Pine	37	27 (73.0%)	24 (64.9%)
Marshall	22	16 (72.7%)	16 (72.7%)
Dodge	61	44 (72.1%)	43 (70.5%)
Big Stone	17	12 (70.6%)	12 (70.6%)
Todd	42	29 (69.0%)	22 (52.4%)
Cottonwood	32	22 (68.8%)	18 (56.2%)
Norman	16	11 (68.8%)	9 (56.2%)
Lake of the Woods	6	4 (66.7%)	4 (66.7%)
Wabasha	71	47 (66.2%)	41 (57.7%)
Meeker	32	21 (65.6%)	19 (59.4%)
Winona	117	75 (64.1%)	72 (61.5%)
Grant	16	10 (62.5%)	9 (56.2%)
Pope	18	10 (55.6%)	8 (44.4%)
Clearwater	15	8 (53.3%)	8 (53.3%)
Traverse	9	4 (44.4%)	4 (44.4%)
Mahnomen	3	1 (33.3%)	1 (33.3%)

### Compensation -study period subgroup analysis

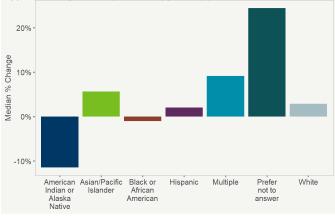
### Median percent change by subgroup

### Figure 19

Median percent change in compensation from providers' first to highest application, by provider type

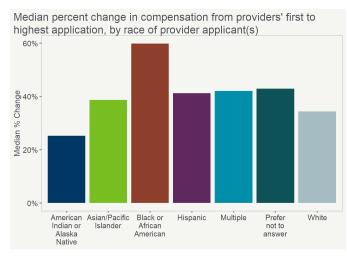
Figure 20

Median percent change in compensation from providers' first to last application, by race of provider applicant(s)



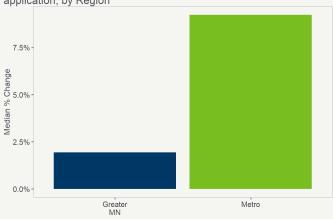
Note: Refers to the race of the applicant and does not reflect the race of other employees or children. Additionally, please use caution when comparing across racial groups, as there may be low numbers of providers for some groups.





Note: Refers to the race of the applicant and does not reflect the race of other employees or children. Additionally, please use caution when comparing across racial groups, as there may be low numbers of providers for some groups.

Figure 22



Median percent change in compensation from providers' first to last application, by Region



Median percent change in compensation from providers' first to last application, by number of FTEs

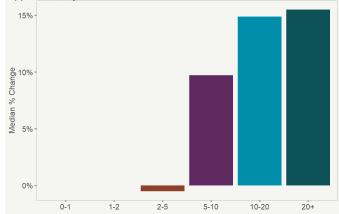


Figure 24

Median percent change in compensation from providers' first to highest application, by number of FTEs

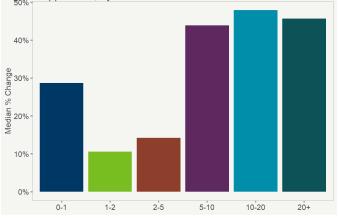
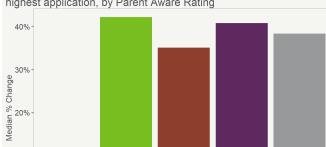


Figure 25



Three Star

Four Star

Not Rated

10%

0%

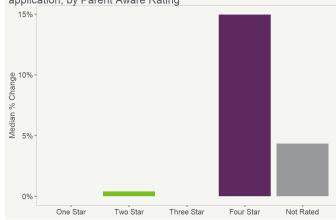
One Star

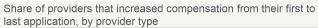
Two Star

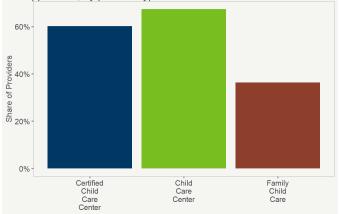
Median percent change in compensation from providers' first to highest application, by Parent Aware Rating



Median percent change in compensation from providers' first to last application, by Parent Aware Rating

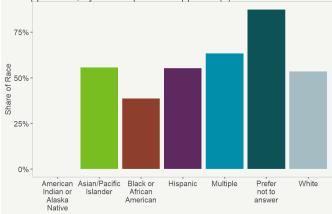




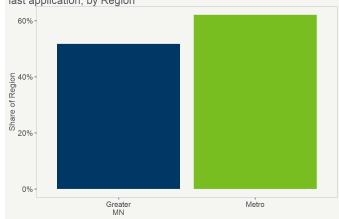




Share of providers that increased compensation from their first to last application, by race of provider applicant(s)

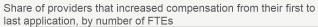


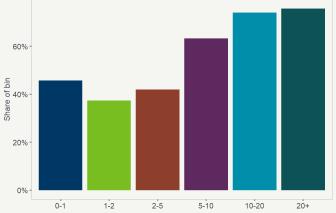
Note: Refers to the race of the applicant and does not reflect the race of other employees or children. Additionally, please use caution when comparing across racial groups, as there may be low numbers of providers for some groups.



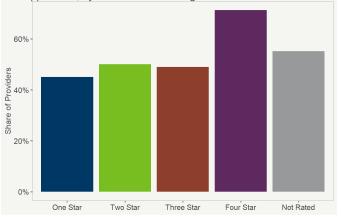
Share of providers that increased compensation from their first to last application, by Region





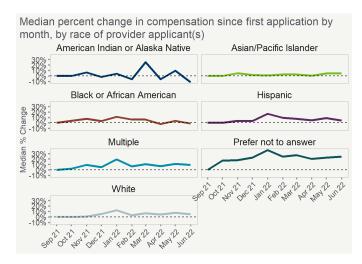






### Compensation - monthly trends subgroup analysis

Figure 32



Note: Refers to the race of the applicant and does not reflect the race of other employees or children. Additionally, please use caution when comparing across racial groups, as there may be low numbers of providers for some groups.

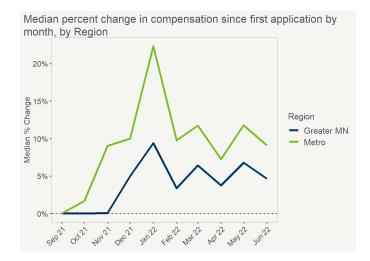
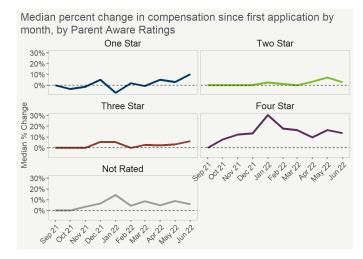


Figure 34



Median percent change in compensation since most recent previous application by month, by number of FTEs 0-1 1-2 10% -5%= 0% -5% = -10% = 2-5 5-10 Median % Change 10% = 5% = 0% = -5% -10% = 10-20 20+ 10% = 5%= 0% --5% = -10% = 21 NOV 21 22 Nar22 1 oct 21 21 pec 21 Sep Oct 2 APT22 Jan 2 tap 1 hat you you you you you Sep 21 Nov 21 ec 21 Jan 2 tep 2 May 22

### Share of providers by subgroup

#### Figure 36

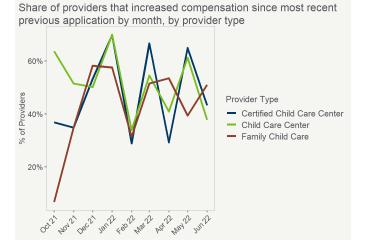
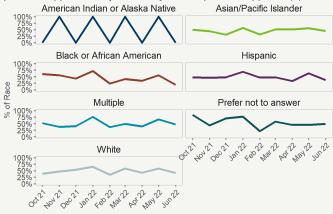


Figure 37

Share of providers that increased compensation since most recent previous application by month, by race of provider  $\mbox{applicant}(s)$ 



Note: Refers to the race of the applicant and does not reflect the race of other employees or children. Additionally, please use caution when comparing across racial groups, as there may be low numbers of providers for some groups.

Figure 38

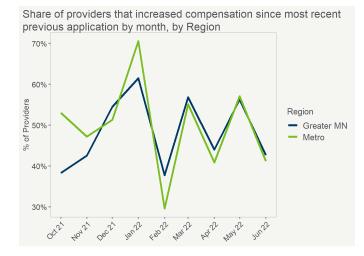
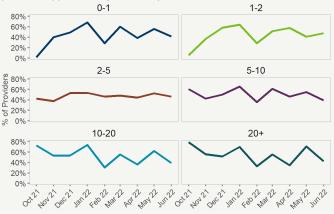
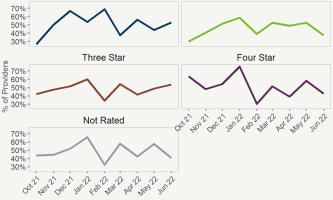


Figure 39

Share of providers that increased compensation since most recent previous application by month, by number of  ${\sf FTEs}$ 

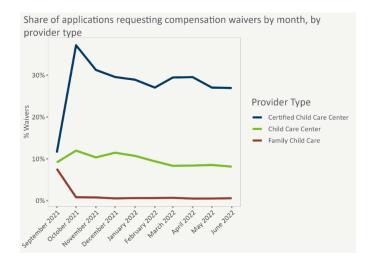






### Waiver analysis

#### Figure 41



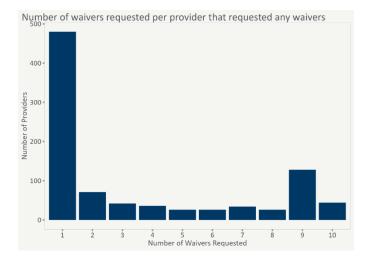
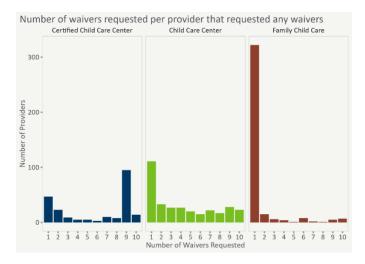
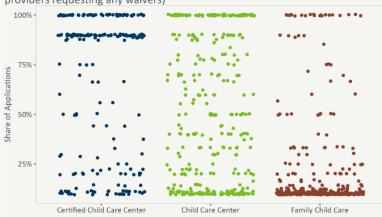


Figure 43

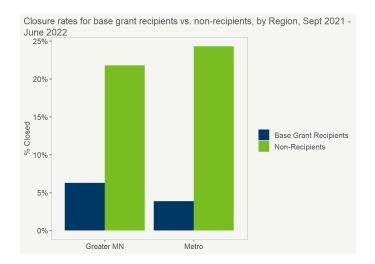


Share of applications where providers requested waivers, by provider type (for providers requesting any waivers)

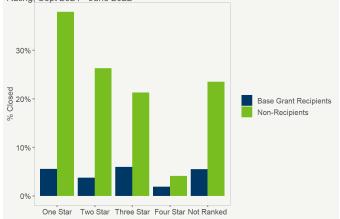


## Closures – full grant period subgroup analysis

### Figure 45



Closure rates for base grant recipients vs. non-recipients, by Parent Aware Rating, Sept 2021 - June 2022





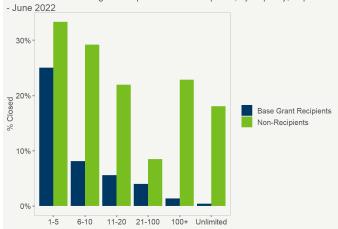
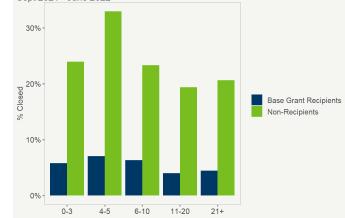


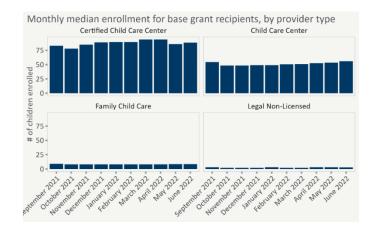
Figure 48

Closure rates for base grant recipients vs. non-recipients, by Length of License, Sept 2021 - June 2022

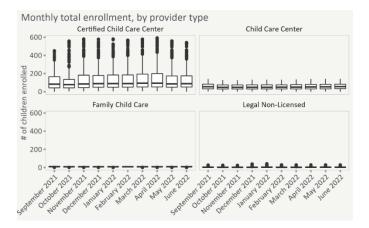


### Enrollment

Figure 49



#### Figure 50



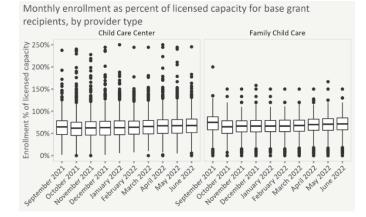
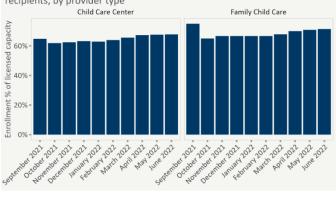
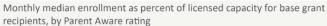


Figure 52

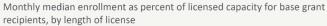
Monthly median enrollment as percent of licensed capacity for base grant recipients, by provider type



#### Figure 53







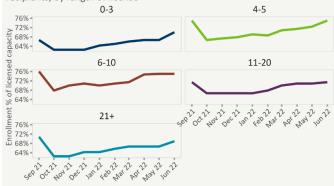


Figure 55

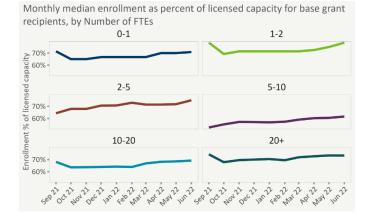


Figure 56

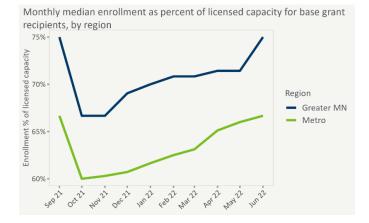
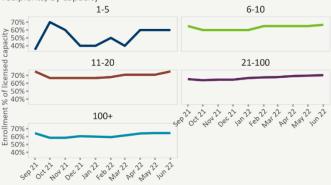


Figure 57

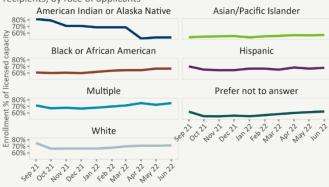
Monthly median enrollment as percent of licensed capacity for base grant recipients, by capacity



54



Monthly median enrollment as percent of licensed capacity for base grant recipients, by race of applicants



Note: Refers to the race of the applicant and does not reflect the race of other employees or children. Additionally, please use caution when comparing across racial groups, as there may be low numbers of providers for some groups.