

# Professional Development for Minnesota's Child Care and Early Education Workforce:

## A Study of the Supply of and Demand for Training

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# Executive Summary

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In recent years, the Minnesota Department of Human Services (DHS) has implemented policies and program initiatives to improve and expand professional development training for the state's child care and early education workforce. One aspect of this process has been implementing Develop – The Minnesota Quality Improvement and Registry Tool. Develop allows center-based and family child care providers to find and track professional development training required for licensing, the Child Care Assistance Program (CCAP), and Parent Aware rating requirements. It also provides a common platform for professional development trainers to become approved, ensuring quality standards, and allows trainers to market training events statewide. Develop was built on a previous professional development registry used since 2008.

With the goal of improving access to training for the child care and early education workforce, DHS contracted with Child Trends to study the supply of and demand for professional development training in Minnesota. Child Trends analyzed administrative data from Develop and conducted online surveys of the workforce and of professional development trainers to understand supply and demand, including use and perceptions of Develop. In addition, Child Trends examined the training needs of the workforce and professional development trainers who do not use Develop. Research questions focused on:

- How the workforce finds training events
- The workforce's training preferences and the types of training available throughout the state
- Barriers to access and whether gaps to access exist in different geographic areas across the state
- Workforce and trainer use of Develop for finding, tracking, and advertising training events

Findings from this study provide critical information about how Minnesota's professional development training system currently functions for the child care and early education workforce and the extent to which progress has been made to ensure equitable access to training events. Recommendations focus on strategies DHS can use to expand and improve access to training across the state and to facilitate the workforce and trainers' use of Develop for finding, tracking, and marketing professional development training.

## Overview

Professional development training supports and strengthens the knowledge and skills of the child care and early education workforce in Minnesota, but barriers to professional development limit some providers' access to and use of this resource. The [2011 Minnesota Child Care Workforce Survey](#) provided insight into the workforce's professional development activities and into the challenges—including time, cost, and transportation—that center-based and family child care providers face when seeking professional development. Since then, the context for the workforce has evolved due to changes in federal funding streams and to enhancements to the state's professional development training system. This study presents findings on the supply of and demand for professional development across Minnesota to better understand the child care and early education workforce's opportunities for and barriers to accessing training.

The Minnesota Department of Human Services (DHS) has a long history of supporting the professional development of the child care and early education workforce. The state's current professional development training system, which includes trainer and training course approval and a professional development registry that allows providers to find and track training, was created in response to a session law passed by the Minnesota state legislature in 2007. In 2011, DHS commissioned the Wilder Foundation to conduct a study of the workforce by examining rates of professional development engagement and barriers to professional development access for center-based and family child care providers throughout the state. It found that center-based and family child care providers sought



professional development to improve the quality of their practice and to grow as professionals, but that they still faced barriers to accessing training.<sup>1</sup>

The context for the child care and early education workforce in Minnesota has changed since the 2011 survey, due in part to the Race to the Top – Early Learning Challenge (RTT-ELC) grant awarded to the state between 2012 and 2016. The RTT-ELC grant supported the statewide expansion of Parent Aware, Minnesota’s Quality Rating Improvement System, which includes standards related to workforce qualifications and coaching and training requirements for achieving quality ratings within the system. The state also used funds to design and implement Develop – The Minnesota Quality Improvement and Registry Tool. Develop allows eligible programs to complete the Parent Aware application process and allows the workforce to participate in professional development activities, including:

- Completing self-assessments
- Identifying training opportunities online
- Tracking professional development progress, including determining career lattice level
- Downloading training records or sharing them electronically with licensors and others

Minnesota’s professional development system has recently been enhanced to include resources like free and low-cost training, new curricula, professional development career advising services, recruitment and support of bilingual and bicultural trainers, and functional improvements to Develop. To better understand how the current professional development training system, and specifically Develop, has been working for the child care and early education workforce and to assess the supply of and demand for training across the state, Child Trends explored research questions about the workforce and trainers. Research questions related to the child care and early education workforce, representing the demand for professional development, ask:

- How do members of the child care and early education workforce find professional development training?
- How useful is Develop for finding and tracking professional development?
- What training methods does the workforce prefer?
- What barriers to and costs of training does the workforce incur?
- What experiences does the workforce have with completing the required training for licensing, accreditation, Parent Aware, or the Child Care Assistance Program (CCAP)?
- How does the workforce access professional development training?

Research questions related to professional development trainers, representing the supply of professional development, ask:

- Under what circumstances would professional development trainers be likely, or more likely, to use Develop?
- What types of professional development do trainers offer?
- What factors affect the cost of training?
- What marketing strategies and registration access points do trainers use?
- Where are professional development trainings located, and where are there gaps in coverage?

The study presents findings from four sources of data:

- Administrative data from 11,527 center-based and family child care providers from the Develop data system
- Online surveys of 2,208 center-based and family child care providers who do (91 percent) and do not (9 percent) use Develop

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<sup>1</sup> Valorose, J. and Chase, R. (2012). *Child Care Workforce in Minnesota 2011 Statewide Study of Demographics, Training and Professional Development: Final Report*. Minnesota Department of Human Services.

- Online surveys of 257 professional development trainers who do (58 percent) and do not (42 percent) use Develop
- Data on the geographic location of workforce members and trainers

Recommendations focus on ways in which DHS can expand and improve access to training across the state for the workforce and strategies for enhancing workforce members' and trainers' use of Develop.

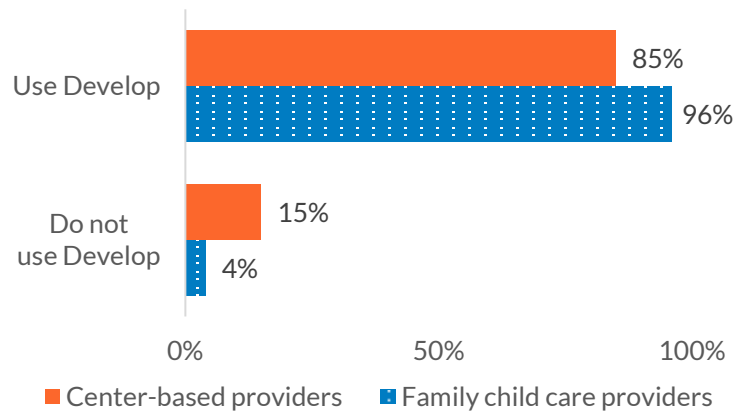
## Summary of Findings

Overall, most members of the child care and early education workforce and professional development trainers reported using Develop. Family child care providers reported using Develop at higher rates than center-based providers (Figure 1). The workforce still faced a range of barriers to accessing professional development depending on the care setting in which they worked and their location across the state; cost and location emerged as primary barriers. In addition, while trainers reported being willing to travel long distances to conduct training, they also indicated that distance to training impacted training costs. This

relationship between the workforce's experiences with cost and location barriers and trainers' experiences with cost and location challenges indicate a need for additional support in this area. The study's key findings include:

- **Most members of the child care and early education workforce and professional development trainers use Develop to some extent.** The majority of workforce members and trainers who responded to surveys reported using Develop. Many of those who did not use it actively still identified it as one way they find or advertise training.
- **The child care and early education workforce considers Develop useful and easy to use.** Family child care providers in particular identified Develop as a helpful tool for tracking professional development records.
- **Trainers sometimes use different venues to advertise professional development events than those commonly used by the workforce to search for training.** Both the workforce and trainers commonly use Develop to either find or advertise training. Members of the workforce often reported searching for upcoming conferences sponsored by state and local early childhood education (ECE) organizations, and a modest number used social media. However, fewer than one in four trainers used social media to advertise training, and less than 5 percent reported using local ECE organizations.
- **Family child care providers and providers in rural areas face different barriers to accessing professional development training than center-based providers and providers in the seven-county metro area.** Relative to center-based providers, family child care providers were more likely to report not taking training due to a lack of new or interesting training opportunities. In addition, rural providers were more likely than their metro peers to report their location as a barrier to accessing professional development training.
- **Family child care providers reported having more trouble than their center-based peers in completing the professional development requirements for licensing, credentialing, or other standards.** Family child care providers were more likely to find it somewhat difficult to complete professional development requirements for licensing, accreditation, and early childhood credentials.

Figure 1. Develop Use by Provider Type



Source note: Child Trends workforce survey data 2018

- **Center-based providers can often access training opportunities through their employers.** Most center-based providers reported that their employer helped them find training opportunities and/or hosted training opportunities onsite. Child Care Aware districts often work with center directors to deliver free or low-cost onsite training, with funding support from DHS.

## Summary of Limitations

- **Few workforce members with a language preference other than English completed the survey.** Child Trends conducted recruitment efforts aimed at non-English speaking child care and early education workforce members. These efforts included inviting representatives from organizations that work with multilingual or non-English speaking workforce members to the table for an advisory committee meeting. Ultimately, however, few workforce members reported preferring to receive training in languages other than English, and few workforce members took the survey in languages other than English.
- **Other provider subgroups may not be fully represented in the data.** While surveys captured a large group of center-based and family child care providers, the number surveyed does not represent all members of the workforce. Other subgroups of workforce members—for example, those with limited or no access to the internet—would not have been able to participate in the online survey.
- **Sample sizes fluctuated throughout the survey.** In the workforce survey and the professional development trainer survey, more respondents answered questions at the beginning of the survey than at the end. To gather as much information as possible on each dimension of the survey, analysis did not omit participants who responded to only some of the survey questions.

## Summary of Recommendations

- **Market Develop to center directors to increase use among the workforce.** More family child care providers than center-based providers used Develop, and center-based providers most often indicated not using Develop because they tracked their training in other ways or because their center did not require it. To expand the use of Develop, DHS should consider ways to market Develop to center directors, who are tasked with ensuring that their staff meet training and education requirements and have opportunities for professional development.
- **To increase the use of Develop among trainers, further market and expand the technical supports offered to trainers.** Trainers who did not use Develop frequently struggled with getting their courses approved in the system, posting training opportunities, and receiving trainer approval. Trainers have access to technical assistance for Develop through state and local agencies; however, these findings indicate a need to increase awareness of these services and expand available resources.
- **Enhance existing online training opportunities.** A majority of center-based and family child care providers identified online training as one preferred method for taking professional development training. To increase use of online training, examine the variety and novelty of available training content and consider additional marketing strategies to promote use. Since most providers also identified in-person training as a preferred method, consider adopting 'hybrid' training models in which participants attend part of the training in-person and complete the rest online.
- **Offer training on a wide range of topics, especially for family child care providers.** Family child care providers commonly reported that they did not take training because they had already participated in the available training options and/or were not interested in the content. To ensure a wider range of available training, DHS could use administrative data on training titles to examine variety, take steps to solicit more feedback on training, and further explore data from Develop's training evaluation tool.
- **Identify ways to incentivize trainers to offer opportunities in areas where they are willing to travel but may not travel consistently.** Child Care Aware currently offers occasional financial reimbursements for mileage and hotels for trainers willing to travel. Increasing awareness of these resources or expanding available resources could help facilitate more trainer travel. Alternatively, DHS could consider ways to support workforce members with the costs of attending training farther away or bringing trainers to their area.

# Introduction

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Professional development training supports and strengthens the knowledge and skills of the child care and early education workforce in Minnesota, but barriers to professional development limit some providers' access to and use of this resource. The [2011 Minnesota Child Care Workforce Survey](#) provided insight into the workforce's professional development activities and into the challenges—including time, cost, and transportation—that center-based and family child care providers face when seeking professional development. Since then, the context for the workforce has evolved due to changes in federal funding streams and to enhancements to the state's professional development training system. This study presents findings on the supply of and demand for professional development across Minnesota to better understand the child care and early education workforce's opportunities for and barriers to accessing training.

The Minnesota Department of Human Services (DHS) has a long history of supporting the professional development of the child care and early education workforce. The state's current professional development training system, which includes trainer and training course approval and a professional development registry that allows providers to find and track training, was created in response to a session law passed by the Minnesota state legislature in 2007. In 2011, DHS commissioned the Wilder Foundation to conduct a study of the workforce, which identified that many center-based and family child care providers in Minnesota were motivated to pursue professional development to improve the quality of their practice and to grow as professionals.<sup>2</sup> The survey found that nearly all licensed family child care providers, center-based teachers, and center-based assistant teachers reported taking child development or early childhood training over the year prior to the survey. Center teachers and assistant teachers, however, reported taking a median of nearly three times more hours of training (40 and 30 hours, respectively) than family child care providers (12 hours), most likely due to the different requirements for licensure. In addition, few family child care providers, center teachers, and center assistant teachers reported having a professional coach, mentor, or peer support in the last year (16, 19, and 16 percent, respectively). Findings also identified time, cost, and transportation as barriers to accessing professional development.

The context for the child care and early education workforce in Minnesota has changed since the 2011 survey, due in part to the Race to the Top – Early Learning Challenge (RTT-ELC) grant awarded to the state between 2012 and 2016. The RTT-ELC grant supported the statewide expansion of Parent Aware, Minnesota's Quality Rating Improvement System, which includes standards related to workforce qualifications and coaching and training requirements for achieving quality ratings within the system. The state also used funds to design and implement Develop – The Minnesota Quality Improvement and Registry Tool. Develop is multifunctional; it allows center-based and family child care providers to complete the Parent Aware application process and allows family child care providers working with children from infancy to age 10 and center-based providers working with children from infancy to age 12 to participate in professional development activities, including:

- Completing self-assessments
- Identifying training opportunities online
- Tracking professional development progress, including determining career lattice level
- Downloading training records or sharing them electronically with licensors and others

Although the RTT-ELC grant has ended, Develop and Parent Aware still receive funding through the Child Care and Development Block Grant (CCDBG) and Minnesota state general funds.

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<sup>2</sup> Valorose, J., and Chase, R. (2012). Child Care Workforce in Minnesota 2011 Statewide Study of Demographics, Training and Professional Development: Final Report. Minnesota Department of Human Services.



Minnesota's professional development system has recently been enhanced to include resources like free and low-cost training, new curricula, professional development career advising services, recruitment and support of bilingual and bicultural trainers, and functional improvements to Develop. In July 2017, a remodel of the Parent Aware program was launched with updated quality rating requirements, including expanding the training options to meet required quality improvement indicators. Professional Development Advisors (PDA's) have been working directly with the workforce to identify and create training goals and to plan for meeting Parent Aware training requirements. In addition, all providers serving children who receive child care assistance funding were required by federal law to comply with training requirements in the area of [health, safety, and nutrition](#). DHS created free online and face-to-face courses to meet this requirement. Many members of the workforce, regardless of whether or not they fit the criteria for the federal training requirement, chose to participate in health, safety, and nutrition training because it was offered for free and met requirements for licensing.

Given these changes, it is important for the state to understand how the system currently functions for the workforce and the extent to which progress has been made to ensure equitable access within the professional development system. In response to this need, the Department of Human Services commissioned this 2018 study of the supply of and demand for professional development trainings across the state to review the full landscape of training opportunities, including training offered outside the state system.

While the study examined access to training broadly, surveys also asked specific questions about the use and utility of Develop as a tool for the workforce and trainers to find, track, and advertise professional development trainings. Separate research questions asked about the **supply** of training (i.e., professional development trainers) and the **demand** for training (i.e., the child care and early education workforce).

Research questions related to the child care and early education workforce, representing the demand for professional development, ask:

- How do members of the child care and early education workforce find professional development training?
- How useful is Develop for finding and tracking professional development?
- What training methods does the workforce prefer?
- What barriers to and costs of training does the workforce incur?
- What experiences does the workforce have with completing the required training for licensing, accreditation, Parent Aware, or the Child Care Assistance Program (CCAP)?
- How does the workforce access professional development training?

Research questions related to professional development trainers, representing the supply of professional development, ask:

- Under what circumstances would professional development trainers be likely, or more likely, to use Develop?
- What types of professional development do trainers offer?
- What factors affect the cost of training?
- What marketing strategies and registration access points do trainers use?
- Where are professional development trainings located, and where are there gaps in coverage?

Understanding basic patterns of professional development participation and availability, and how these patterns intersect with the workforce and trainers' use of Develop, can provide DHS with critical information to refine and improve the system.

This report presents findings from four sources of data to help answer research questions about the supply of and demand for professional development and the use of Develop across the state:

### What is equitable access?

Equitable access means all providers can find and attend professional development trainings that meet their needs for professional growth and requirements for licensing, the Child Care Assistance Program, Parent Aware, and other credentials or standards. Inequitable access happens when a subgroup of providers faces significantly more challenges to meeting these needs.

- Administrative data analysis of Develop users
- Surveys of workforce members who do and do not use Develop
- Surveys of trainers who do and do not use Develop
- Joint analysis of the geography of supply and demand across the state

This report highlights the key findings from each research question associated with each data source in text, tables, and graphs. Detailed tables with all findings can be found in the Technical Appendix. The report also includes a set of key findings across all data sources and recommendations for supporting access to professional development training.

# Using Develop to Track Professional Development

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## Purpose

Before looking at the broad landscape of child care and early education professional development trainings in Minnesota, Child Trends analyzed administrative data about individuals enrolled in Develop to understand who uses the tool. Findings from the administrative data analysis on members of the workforce and professional development trainers who use Develop laid the foundation for survey recruitment and later interpretation of survey findings. Using data from fiscal year 2017 (FY17), Child Trends examined the following two research questions:

- What are the key features of center-based and family child care providers who track their training in Develop, and how many training events are they tracking on average?
- What are the key features of trainers using Develop minimally (offering fewer than five courses) and fully (offering five or more courses)?

## Methods

Child Trends used FY17 Develop data from 11,527 workforce members provided by DHS. The data included information on training workforce members had completed, their location by zip code, their levels of education, and their primary language. In addition, the Develop data included information about professional development organizations and trainers with greater levels of detail on individual trainers. Using the trainer data, Child Trends examined the number of events that trainers offered, whether they were master trainers, whether they served underserved populations (racially diverse or rural providers), and how far they were willing to travel to provide training. In addition, analysis identified training offered in different areas of Minnesota's Knowledge and Competency Framework (KCF).<sup>3</sup> Significant differences between groups were calculated using analysis of variance (ANOVA) or chi-square goodness-of-fit tests. Significant differences were determined by a threshold of  $p < .05$ .

## Results

### Workforce

On average, family child care providers reported taking nearly twice as many trainings as center-based providers (8.1 and 4.6, respectively). This finding remained consistent across different subgroups of the workforce (Table 1),

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<sup>3</sup> KCF areas represent what educators need to know and demonstrate in order to be effective caregivers and teachers. More information available from: <https://education.mn.gov/MDE/dse/early/know/>

which is contrary to what was expected given licensing requirements for center-based providers compared to family child care providers. Family child care providers are required to take only 16 hours of training per year, while center-based providers are required to participate in training hours totaling 2 percent of their hours worked during the year (40 hours per year for full-time staff).<sup>4</sup> Given these different requirements, the finding on average training events attended from the administrative data likely indicates that family child care providers tend to use Develop to report more of the training they have taken, rather than that they have taken more training overall.

**Table 1.** Average number of training for each subgroup as reported in Develop

	Family child care (N = 3,101)	Center-based (N = 8,426)
<b>Total</b>	8.1*	4.6
<b>Urbanicity</b>		
Rural	8.4*	5.9
Suburban	8.0*	6.8
Urban	8.1*	4.3
<b>Education</b>		
Less than high school	5.8*	3.9
High school, no associate's	8.3*	4.8
Child development associate's	11.4*	4.8
Bachelor's or graduate degree	7.7*	3.9
<b>English is primary language</b>		
English is not primary	9.6*	5.1
English is primary	8.2*	4.5

Source: Develop, Minnesota's Quality Improvement and Registry Tool (February 2018)

Note. Values marked with an asterisk are statistically significantly higher than the subsequent values without an asterisk.

## Trainers

Professional training organizations and individual professional development trainers can register in Develop to provide training. Of 451 training organizations registered in Develop that offered training in FY17, just over a third (36 percent) offered five or more training events and could be classified as **full Develop users**. An additional 169 organizations had registered in Develop but did not offer any training opportunities in FY17.

Of the 738 individual trainers registered in Develop, 362 (50 percent) did not offer any training events in FY17. Of those who did offer training, 66 percent offered five or more events (**full users**) and 34 percent offered between one and five events (**minimal users**). Few approved trainers (10 percent) reported offering training in a language other than English. A higher percentage of full users served child care and early education workforce members categorized as underserved (i.e., non-white workforce members or rural workforce members), and they were willing to travel farther to offer training. In addition, a higher percentage of full users reported offering training in the KCF areas of Child Development and Learning, Health and Safety, and Clinical Experiences (Table 2).

**Table 2.** Characteristics of trainers that use Develop by user status

	Full users (N = 240)	Minimal users (N = 126)
Is Master trainer	28%	22%
Serves underserved populations	60%*	45%
Average miles willing to travel	150*	108
<b>KCF Area</b>		
Area I: Child development and learning	82%*	66%
Area II: Promoting child development	82%	83%
Area III: Relationships with families	81%	78%

<sup>4</sup> <https://mn.gov/dhs/partners-and-providers/licensing/help-for-providers-by-license-types/child-care-and-early-education/>

	Full users (N = 240)	Minimal users (N = 126)
Area IV: Assessment	81%	76%
Area V: Development of ECE	44%	37%
Area VI: Professionalism	85%	91%
Area VII: Health and safety	86%*	67%
Area VIII: Clinical experiences	15%*	6%

Source: Develop – Minnesota’s Quality Improvement and Registry Tool (February 2018)

Note. Values marked with an asterisk are statistically significantly higher than the values without an asterisk in that category.

# The Demand for Professional Development Training

## Purpose

To better understand the demand for professional development from child care and early education workforce members who use Develop and those who do not use Develop, Child Trends surveyed center-based and family child care providers throughout Minnesota caring for children ages birth through 12. The survey asked about their experiences with and perceptions of Develop and their experiences finding and completing professional development training. The survey addressed the following research questions:

- How do members of the child care and early education workforce find professional development training?
- How useful is Develop for finding and tracking professional development?
- What training methods does the workforce prefer?
- What barriers to and costs of training does the workforce incur?
- What experiences does the workforce have with completing the required training for licensing, accreditation, Parent Aware or the Child Care Assistance Program (CCAP)?
- For individuals employed in center-based programs, to what degree does their employer organize and provide professional development opportunities for them as opposed to finding training on their own?
- For family child care providers, to what degree do they access professional development opportunities through a local family child care association?

In addition to examining the experiences of the workforce as a whole, the study details the experiences of key subgroups of early educators and child care providers, including:

- Family child care and center-based providers
- Providers who prefer a language other than English
- Providers working outside the Twin Cities metropolitan area
- Providers serving children across the age spectrum

The study also examines the experiences of **Develop users**, who have used Develop to track their training since January 2017 and **Develop non-users**, who may have a Develop account but who have not actively used it to track training since January 2017. By determining whether experiences differ across these subgroups, the study aimed to learn more about equitable access to training across provider types, geographic location, and other factors that workforce members have indicated as unique barriers to accessing professional development training.

## Methods

Child Trends identified and recruited eligible early educators and child care providers in Minnesota using administrative data from Develop and from Minnesota's child care licensing database. Providers working in Head Start, public schools, or charter school settings were not recruited because DHS already understands the training they receive, which is largely provided through the organizations where they work. Child Trends recruited providers using emails, Facebook advertisements, postcards, and word-of-mouth referrals, depending on available contact information. In addition, members of an advisory council made up of representatives from child care and early education organizations around the state distributed recruitment materials to their networks. Providers had the option to take the survey in English, Spanish, Somali, or Hmong. A total of 2,208 individuals responded to the 42-question online survey providing information about their experiences finding and taking professional development in Minnesota and their experiences with or understanding of Develop.

Because survey questions were voluntary, questions had varying rates of missing responses. Questions that all respondents had the option to answer had data missing at rates up to 17 percent; questions that only certain subsets of respondents had the option to answer had data missing at rates up to 35 percent. Center-based providers had the highest rates of missing data. Additionally, because the missing data rate differed by question, percentages included in tables and graphs represent the percent of respondents who answered the specific question referenced; total numbers of respondents for each question are listed at the bottom of each table. Tables and graphs note when survey questions gave the option for respondents to select all responses that applied and when organizations listed in response options receive full or partial funding from DHS. Additional information regarding recruitment and missing data rates are available in the Technical Appendix.

The analysis plan included descriptive analyses of responses to each question and comparison of responses across the following subgroups using chi-square or analysis of variance (ANOVA) tests (given the number of analyses and multiple comparisons, significant differences were determined by a threshold of  $p < .01$ ):

- Program type (center-based compared to family child care)
- Develop user type (full users compared to non-users)
- Geographic area (comparing across Child Care Aware Districts – see Appendix A)
- Ages served by center-based providers (infants/toddlers, preschoolers, and school-aged children)

Although other subgroups could be identified from the survey data, we did not examine subgroup differences by language, legal non-licensed provider type, or ages served by family child care providers. While we were able to break down responses by workforce members whose preferred language was not English (i.e., respondent took the survey in Spanish, Somali or Hmong, or they indicated their preferred training language as a language other than English), this group was too small to compare to the group of providers whose preferred language was English. Throughout the report, we highlight findings from this group without comparing them to any other group of respondents. Detailed findings from this subgroup are presented in the Technical Appendix. Legal non-licensed providers were also too small a group to compare to center-based or family child care providers. This subgroup was not a focus of this study; however, detailed findings from this subgroup are presented in the Technical Appendix. Finally, because family child care providers tended to serve children of all ages, ranging from infants through school-age children, we were not able to analyze their responses separately by ages served.

## Results

Of respondents who reported the setting in which they provided care, 41 percent reported working in center-based settings, 51 percent reported working in family child care settings, and 1 percent reported working in legal non-licensed care settings. The majority of respondents reported using Develop to track their training (91 percent), while only 9 percent reported not using Develop to track their training. Respondents also had a range of professional and demographic characteristics (Tables 3-6). (Significant differences were not tested among subgroups on these characteristics.)



**Table 3. Providers' languages**

Language	N	%
English	2168	98%
Hmong	1	<1%
Spanish	39	2%
<b>Total</b>	<b>2208</b>	

Source: Child Trends workforce survey data 2018

**Table 4. Current position at program by provider type**

Position	Total sample		Family child care		Center-based		Legal non-licensed	
	N	%	N	%	N	%	N	%
Lead teacher/teacher	1042	47%	426	39%	608	68%	8	36%
Assistant teacher/teacher's aide	121	5%	19	2%	101	11%	1	5%
Owner	944	43%	913	83%	28	3%	3	14%
Director	312	14%	134	12%	174	19%	4	18%
Assistant director	78	4%	9	1%	69	8%	0	0%
Substitute	22	1%	7	1%	13	1%	2	9%
Primary caregiver	701	32%	679	62%	14	2%	8	36%
Other, please specify	53	2%	21	2%	30	3%	2	9%
<b>Total</b>	<b>2021</b>		<b>1104</b>		<b>895</b>		<b>22</b>	

Source: Child Trends workforce survey data 2018

Note: Respondents could select all responses that applied.

**Table 5. Highest level of education by provider type**

Education level	Total sample		Family child care		Center-based		Legal non-licensed	
	N	%	N	%	N	%	N	%
Less than high school education	12	1%	7	1%	5	1%	0	0%
High school diploma, GED or high school equivalent	482	22%	376	42%	102	13%	4	25%
Associate's degree in early childhood education or a related field	303	14%	112	12%	190	25%	1	6%
Associate's degree outside of early childhood education	186	8%	135	15%	49	6%	2	13%
Bachelor's degree in early childhood education or a related field	327	15%	118	13%	204	26%	5	31%
Bachelor's degree outside of early childhood education	232	11%	117	13%	112	15%	3	19%
Graduate degree (MS/MA/EdD/PhD, etc.)	99	4%	38	4%	60	8%	1	6%
<b>Total</b>	<b>1641</b>		<b>903</b>		<b>772</b>		<b>16</b>	

Source: Child Trends workforce survey data 2018

**Table 6. Develop user status by provider type**

Develop user type	Total sample (N = 1813)	Family child care (N = 1007)	Center-based (N = 789)	Legal non-licensed (N = 17)
Non-user	9%	4%	15%	35%
User	91%	96%	85%	65%

Source: Child Trends workforce survey data 2018

Analysis demonstrated that the type of setting in which providers worked was closely aligned with their geographic location defined as their Child Care Aware District (Table 7). The majority of respondents from the metro district worked in centers (58 percent), while the majority of respondents from the four rural districts worked in family child care settings (65 percent). In addition, although few respondents did not use Develop to track professional

development training, 72 percent of Develop non-users (n=168) worked in centers. Consequently, the associations between provider type and responses to the research questions may also reflect differences between geographic location and use of Develop.

**Table 7. Geographic location by provider type**

District	Total sample (N = 2208)	Family child care (N = 986)	Center-based (N = 750)	Legal non-licensed (N = 15)
Northeast	9%	18%	5%	6%
Northwest	9%	12%	10%	13%
West/Central	13%	21%	10%	40%
South	10%	16%	10%	13%
Metro	36%	32%	64%	26%

Source: Child Trends workforce survey data 2018

Key findings related to the research questions are highlighted below, and full responses can be found in the Technical Appendix.

## The child care and early education workforce most frequently looked for training through Develop or through their local Child Care Resource and Referral agency.

Respondents reported the resources they used to search for training. As shown in Table 8, Develop users most commonly reported looking for training through Develop (79 percent), followed by Eager-to-Learn (57 percent) and their local Child Care Resource and Referral agency (CCR&R; 49 percent). All three of these resources receive funding from DHS and offer low-cost or free training options to the workforce. Although Develop was not a top resource for non-users to find training, nearly a third of non-users did indicate that they used it when looking for training (30 percent). Top responses for where non-users find training included their local CCR&R (46 percent), supervisors at their program (43 percent), and coworkers (35 percent).

**Table 8. Resources used to look for training by user type**

Top five resources	Non-users N	%	Top five resources	Users N	%
Pine Tech Child Care Aware (Northeast CCR&R)*	68	44%	Use Develop*	1258	79%
Supervisor(s) at my program	67	43%	Eager-to-Learn*	910	57%
Think Small (Metro CCR&R)*	54	35%	Think Small (Metro CCR&R)*	486	30%
Coworkers	54	35%	Look for upcoming conferences/meetings	438	27%
Tie: Develop*; Search the internet (e.g., Google)	47	30%	Coworkers	351	22%
<b>Total</b>	<b>155</b>		<b>Total</b>	<b>1891</b>	

Source: Child Trends workforce survey data 2018

Note. Findings are descriptive; significance tests were not conducted on the differences between where each subgroup reported training.

\* Indicates organization/resource that receives DHS funding

A higher percentage of family child care providers (83 percent) than center-based providers (63 percent) reported using Develop to find training (Table 9). In addition, more rural providers (81 to 87 percent) than providers in the metro district (61 percent) reported using Develop when looking for training; this difference was statistically significant and consistent with findings that more family child care providers work in rural districts and more center-based providers work in the seven-county metro area. Metro providers were about as likely to use their local CCR&R, Think Small, as a resource for finding training (60 percent) as they were to use Develop (61 percent).

**Table 9.** Resources used to look for training by provider type

Top five resources	Family child care		Top five resources	Center-based	
	N	%		N	%
Use Develop*	867	83%	Use Develop*	523	63%
Eager-to-Learn*	642	62%	Supervisor(s) at my program	396	48%
Think Small (Metro CCR&R)*	274	26%	Eager-to-Learn*	363	44%
Parent Aware mentor/coach or my PD Advisor*	251	24%	Coworkers	342	41%
Look for upcoming conferences/meetings	245	24%	Think Small (Metro CCR&R)*	300	36%
<b>Total</b>	<b>1041</b>			<b>832</b>	

Source: Child Trends workforce survey data 2018

Note. Findings are descriptive; significance tests were not conducted on the differences between where each subgroup reported training.

Respondents could select all responses that applied. \* Indicates organization/resource that receives DHS funding

Family child care providers can also use local and national family child care associations to find training. Of family child care providers who responded, 9 percent reported looking for training through the Minnesota Child Care Provider Information Network (MCCPIN). A small number of family child care providers reported using national family child care associations, including the National Association for Family Child Care (5 percent) and the Family Child Care Association (8 percent) to find training opportunities. Providers with a training language preference other than English most often found training opportunities through Develop, their local CCR&R, and Eager-to-Learn.

Providers reported the names of several other organizations and resources through which they found training; full lists of these open-ended responses are available in the Technical Appendix.

## Most center-based and family child care providers reported taking training from Eager-to-Learn or at a conference.

Many providers reported taking training from Eager-to-Learn or Anytime Learning, one of Eager-to-Learn's online training platforms (Table 10). However, when looking across subgroups, Develop users were much more likely to use this platform (59 percent) compared to non-users (13 percent). Since 2016, all Eager-to-Learn users register for events through Develop; non-users, however, may sign into Develop for registration purposes but may not actively use Develop otherwise. It was also common for respondents to report taking training at conferences (45 percent). Across subgroups, equal percentages of Develop users and non-users reported taking training at conferences; center-based providers (52 percent) reported taking training at conferences at slightly higher rates than family child care providers (40 percent). The most popular conference hosts reported were the Minnesota Association for the Education of Young Children (5 percent), Milestones (4 percent), University of Wisconsin – Stout (4 percent), workplace-sponsored (4 percent), and Applebaum (3 percent).

**Table 10.** Training sources by user type

Top five places	Non-users		Top five places	Users	
	N	%		N	%
Provided by employer	41	27%	Anytime Learning/Eager-to-Learn*	900	59%
Another professional group or organization	35	23%	Another professional group or organization	264	17%
Local schools or school districts	24	16%	Provided by employer	184	12%
Anytime Learning/Eager-to-Learn*	20	13%	Local schools or school districts	160	10%
MN Association for the Education of Young Children	20	13%	Local licenser	137	9%
<b>Total</b>	<b>151</b>			<b>1533</b>	

Source: Child Trends workforce survey data 2018

Note. Findings are descriptive; significance tests were not conducted on the differences between where each subgroup reported training.

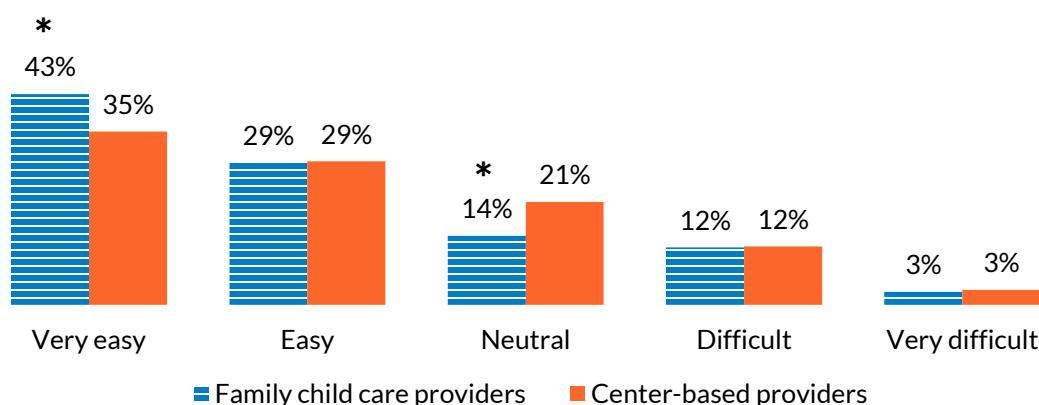
Respondents could select all responses that applied. \* Indicates organization/resource that receives DHS funding

Few center-based and family child care providers reported taking training through their local child care associations (0-8 percent), although CCR&R staff work with centers and family child care associations on a regular basis to offer customized, DHS-subsidized training to the workforce. Survey respondents were given several options, including open-ended responses, to identify organizations or places through which they could have taken training; the full list of responses can be found in the Technical Appendix.

## Most Develop users, including users with a language preference other than English, found the system easy to use and helpful to their professional development.

The majority of Develop users reported that the system was easy (29 percent) or very easy (40 percent) to use (Figure 2). In addition, a majority of Develop users found the system to be somewhat helpful (33 percent) or very helpful (34 percent) for their professional development. As shown in Figure 3, family child care providers indicated that Develop was helpful for their professional development at higher rates than providers working in center-based care settings (38 and 29 percent, respectively). In addition, more providers in the northwest district of the state found Develop to be helpful for professional development (47 percent) than providers in other districts.

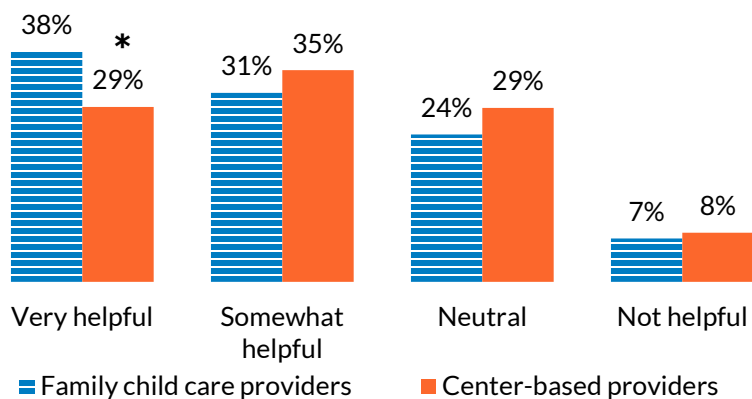
**Figure 2.** Perceptions of how easy it is to use Develop by provider type



Source: Child Trends workforce survey data 2018

Note. Values with asterisks are statistically significantly different from values without asterisks within each response option.

**Figure 3.** Perceptions of how helpful Develop is for professional growth by provider type



Source: Child Trends workforce survey data 2018

Note. Response categories with statistically significant differences between family child care and center-based providers are noted with asterisks.

Non-users reported varying reasons for not using Develop depending on their care setting. As shown in Table 11, center-based providers reported that they did not use Develop because they tracked their training in other ways (33 percent) and/or their employer did not require them to use Develop (28 percent). Family child care providers, on the other hand, reported not using Develop because they tracked their training in other ways (54 percent) and/or because they did not know the benefits of Develop (32 percent). Approximately 40 percent of center-based and family child care providers said they would be more likely to use Develop if they knew what it offered and/or if it were easier to submit documentation. Other reasons reported by respondents can be found in the Technical Appendix.

**Table 11. Providers' reasons for not using Develop to track training by provider type**

Reasons	Family child care		Center-based	
	N	%	N	%
Track in other ways	15	54%	27	33%
Not required by employer	1	4%	23	28%
Too hard to submit documentation/receive credit	4	14%	20	24%
Open-ended	4	14%	18	22%
Don't know benefits	9	32%	16	19%
Don't know what it is	5	18%	15	18%
Not required by program/degree	2	7%	9	11%
Too hard to make account	2	7%	4	5%
No internet access	0	0%	2	2%
<b>Total</b>	<b>28</b>		<b>83</b>	

Source: Child Trends workforce survey data 2018

Note. Sample sizes in each response category were too small to compare significant differences. Respondents could select all responses that applied.

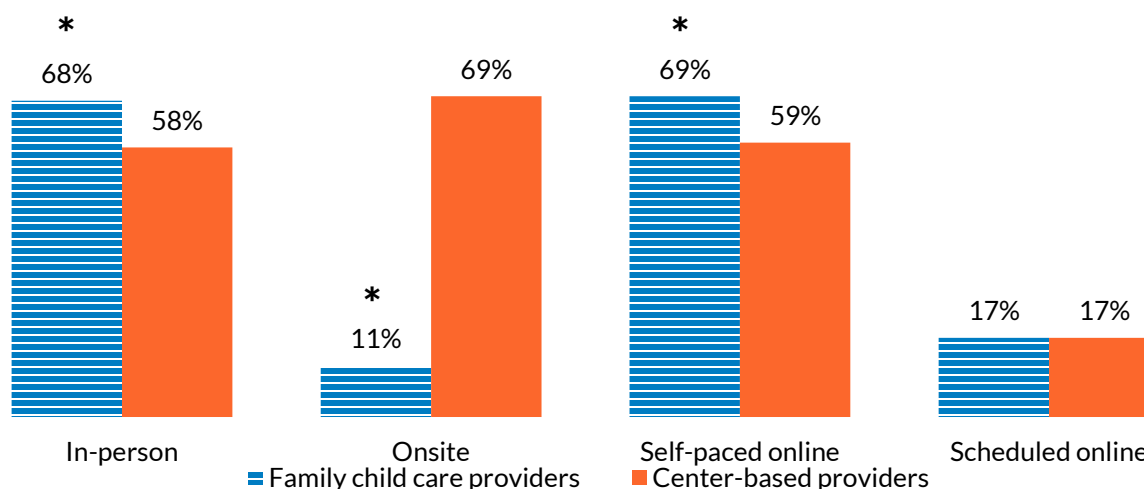
A majority of providers with a language preference other than English found Develop somewhat easy or easy to use. In addition, a majority found Develop to be somewhat helpful or very helpful to their professional growth and development and for finding training.

## The workforce's training preferences varied depending on work setting.

As shown in Figure 4, family child care providers tended to prefer attending training in-person at a site other than their workplace (68 percent), while center-based providers tended to prefer training conducted onsite at their place of employment (69 percent). Because family child care providers generally do not have the space or staff volume to bring trainers to their homes, this difference in preferences aligns with expectations. More family child care providers than center-based providers also reported a preference for taking online, self-paced training (69 and 59 percent, respectively). Providers could select multiple preferred training methods, allowing for both web-based and in-person training options to emerge as top preferences.



**Figure 4. Preferred training formats by provider type**



Source: Child Trends workforce survey data 2018

Note. Response options with statistically significant differences between family child care and center-based providers are noted with asterisks. Respondents could select all responses that applied.

Training preferences also varied by district. Metro providers preferred onsite training (48 percent) at higher rates than rural providers (24 to 33 percent). This finding likely relates to the higher numbers of family child care providers working in rural districts.

### The workforce prefers training offered on weekdays during the evening.

Family child care and center-based providers also had slightly different preferences when it came to times and days they preferred to take training. More family child care providers than center-based providers preferred taking training on weekdays during the evenings (84 versus 65 percent), although both types of providers preferred this time overall. The second most common training time preference was weekend days (33 percent for both types of providers) followed by weekdays during the day (7 percent for family child care providers; 24 percent for centers).

### The workforce reported training costs and location as top barriers to participating in professional development.

Providers reported the amount of time it takes to participate in a training (32 percent), the cost of training (24 percent), and location or travel time to training (21 percent) as top barriers to participating in professional development (Table 12). These findings remained relatively consistent across provider type, Develop user status, and location, although a higher percentage of providers in the northeast district listed location or travel time to training as their top barrier (27 percent) compared to providers in other districts (10 to 21 percent).

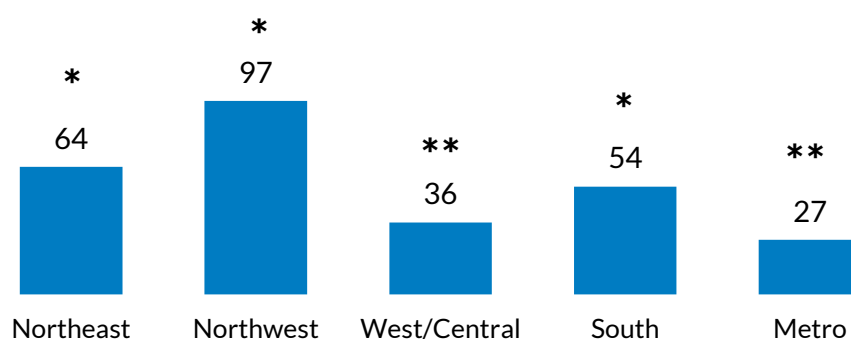
**Table 12.** Barriers to attending training for total sample

Barriers	Total sample	
	N	%
Time to take training	413	32%
Cost	308	21%
Location (travel time)	277	21%
Inability to find training that meets requirements	87	7%
Inability to find training I haven't already taken	87	7%
Inability to find training topics of interest to me	93	7%
Language	26	2%
Inability to access or use Develop	11	1%
<b>Total</b>	<b>1302</b>	

Source: Child Trends workforce survey data 2018.

A high percentage of providers also reported that they had been interested in attending a training but had not because the location was too far away (68 percent) or the cost was too high (54 percent). More Develop users (69 percent) than non-users (55 percent) identified location as a barrier, and more family child care providers (76 percent) than center-based providers (57 percent) identified location as a barrier. Findings also differed by the district in which providers offered care. Center-based and family child care providers in the northwest and west/central districts more often reported high training costs as a barrier than those in other districts, while center-based and family child care providers in the northeast and west/central districts more often reported location as a barrier.

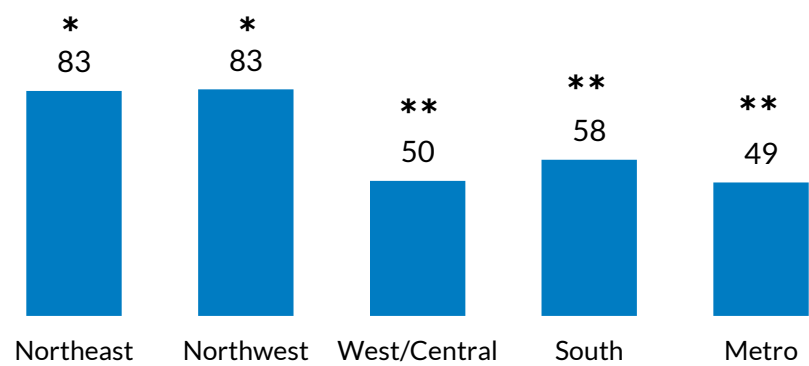
To better understand cost and location barriers, the survey asked providers how much they had spent on training over the last year and how far they were willing to travel to training. On average, providers reported spending close to \$250 in the last year on training; this did not vary by Develop user status, program type, district, or ages served. In terms of training location, providers were willing to travel 44.6 miles or just under an hour (58 minutes) to attend training. Workforce members in the northwest district were willing to travel 60 to 70 miles farther than those in the west/central and metro districts, and workforce members in the northeast and northwest districts were willing to travel an extra half-hour compared to those in west/central, south, or metro districts (Figures 5-6).

**Figure 5.** Average miles willing to travel for training by district

Source: Child Trends workforce survey data 2018

Note. Bars marked with one asterisk are statistically significantly different from all other bars in the graph. Bars marked with two asterisks are not statistically significantly different from each other but are different from all bars marked with one asterisk.

Figure 6. Average minutes willing to travel to training by district

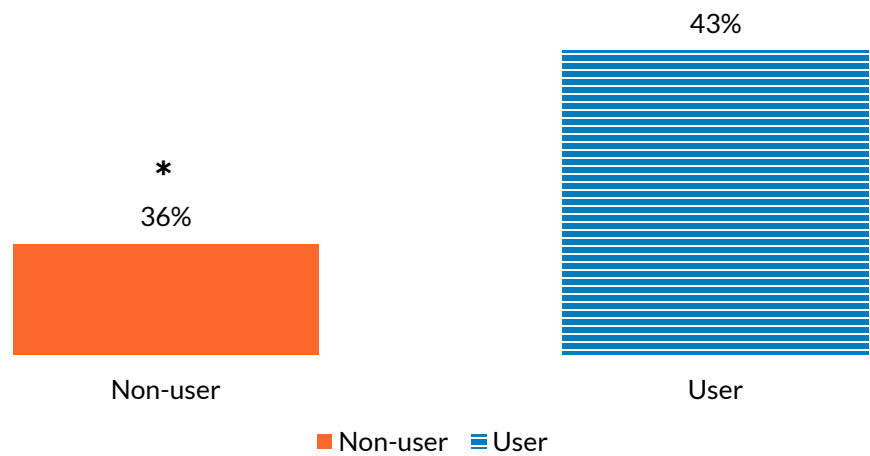


Source: Child Trends workforce survey data 2018  
Note. Bars with one asterisk are statistically significantly different from bars with two asterisks but not different from each other. Bars with two asterisks are statistically significantly different from bars with one asterisk but not different from each other.

Center-based and family child care providers sometimes struggled to find training of interest.

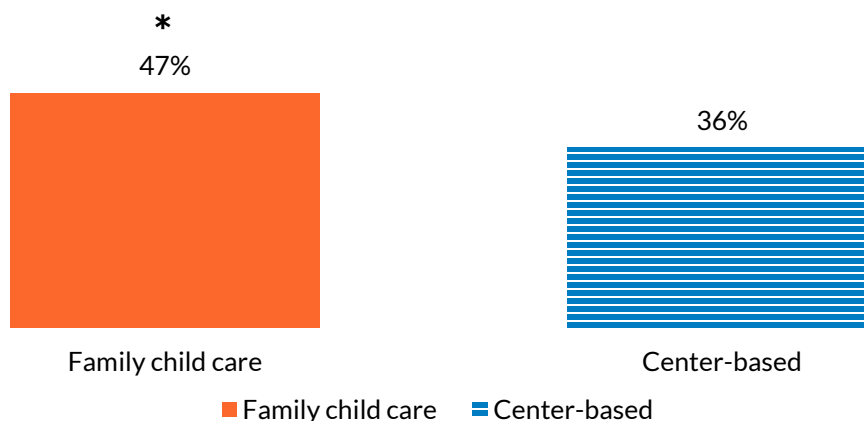
More than a third of center-based and family child care providers reported that at least one time in the past year they wanted to attend a training but did not because they were uninterested in the topics available (42 percent). As shown in Figure 7, Develop users (43 percent) encountered this issue at a statistically significantly higher rate than non-users (36 percent), and a higher percentage of family child care providers (47 percent) than center-based providers (36 percent) reported experiencing this situation (Figure 8).

Figure 7. Providers who reported they were not interested in available training by user type



Source: Child Trends workforce survey data 2018  
Note. Statistically significant difference is noted with asterisk.

**Figure 8.** Providers who reported they were not interested in available training by provider type



Source: Child Trends workforce survey data 2018

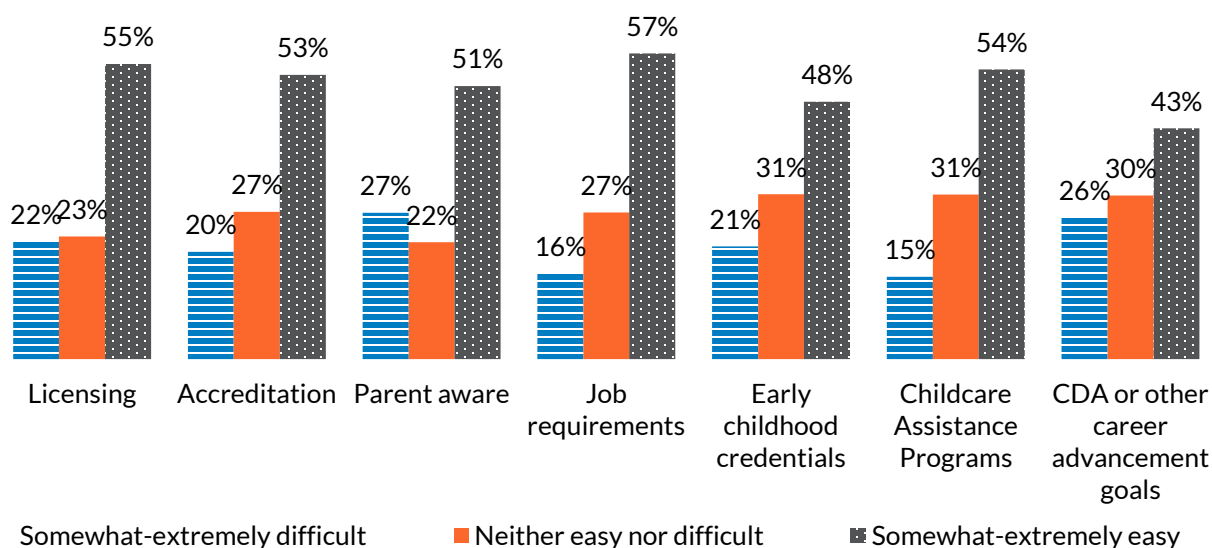
Note. Statistically significant difference is noted with asterisk.

A subset of providers also reported that they had been interested in taking training but did not do so because they had already taken all the available training options (25 percent). Similar to findings on whether providers were interested in available topics, a higher percentage of family child care providers reported this barrier (29 percent) than center-based providers (19 percent).

## Center-based and family child care providers felt differently about the ease of completing training required for licensing, professional development, and CCAP.

As shown in Figure 9, approximately half of providers reported that it is either somewhat or extremely easy to complete training required for licensing (55 percent), accreditation (53 percent), Parent Aware (51 percent), job requirements (57 percent), early childhood credentials (48 percent), CCAP participation (54 percent), and/or CDA or other professional goals (43 percent). This leaves a large portion of providers, however, who reported that completing training required for these programs is at least somewhat difficult.

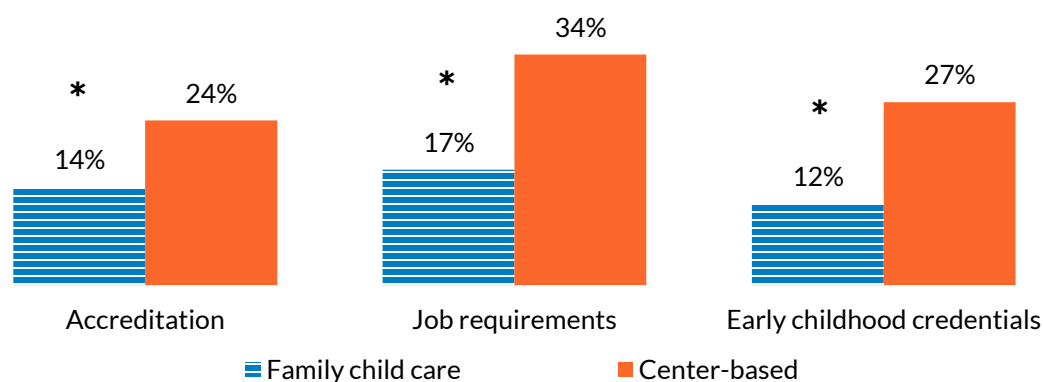
**Figure 9.** Providers' reported ease of completing required training



Source: Child Trends workforce survey data 2018

Findings differed by provider type in several areas. As shown in Figure 10, a higher percentage of center-based providers than family child care providers found it extremely easy to complete training required for accreditation (24 versus 14 percent), job requirements (34 versus 17 percent), and early childhood credentials (27 versus 12 percent). Similarly, a higher percentage of family child care providers compared to center-based providers found it somewhat difficult to complete training required for licensing and job requirements (Figure 11).

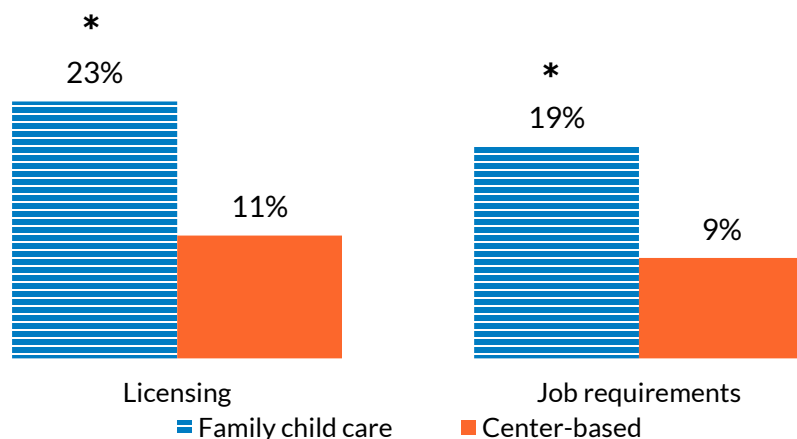
**Figure 10.** Providers finding it extremely easy to complete training for accreditation, job requirements, and early childhood credentials by provider type



Source: Child Trends workforce survey data 2018

Note. Response options with statistically significant differences between family child care and center-based providers are noted with asterisks.

**Figure 11.** Providers finding it somewhat difficult to complete training for licensing and job requirements by provider type.



Source: Child Trends workforce survey data 2018

Note. Response options with statistically significant differences between family child care and center-based providers are noted with asterisks.

## Center-based providers were likely to find training through their employer at least some of the time.

A majority of center-based providers indicated that their employer found training for them occasionally (24 percent), frequently (33 percent), or all the time (23 percent). Most center-based providers also reported that their employers hosted training for them onsite occasionally (38 percent), frequently (28 percent), or all the time (8



percent). Generally, providers reported not having to pay for training that their employer hosted onsite (91 percent). Local CCR&R district staff often consult and provide free or low-cost training to centers, with funding support from DHS, meaning respondents who did report having to pay for onsite training likely paid a reduced rate.

# The Supply of Professional Development Training

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## Purpose

To understand the supply of professional development in Minnesota, Child Trends surveyed trainers offering professional development to the child care and early education workforce in Minnesota. The survey addressed the following research questions:

- Under what circumstances would professional development trainers be likely, or more likely, to use Develop?
- What types of professional development do trainers offer?
- What factors affect the cost of training?
- What marketing strategies and registration access points do trainers use?
- Where is professional development training located, and where are there gaps in coverage?

In addition, Child Trends was interested in whether the experiences of trainers differed among three types of Develop users:

- **Non-users:** Trainers who had not registered an event on Develop since January 2017 or who do not have a Develop account
- **Minimal users:** Trainers who had registered fewer than five events since January 2017
- **Full users:** Trainers who had registered five or more events since January 2017

## Methods

Child Trends used data from Develop to identify and recruit professional development trainers and data from the workforce survey about organizations through which center-based and family child care providers reported taking training. To be eligible for the survey, trainers must have offered training to center-based and family child care providers in Minnesota in the 18 months before taking the survey. Child Trends recruited trainers using similar strategies to those used for the workforce survey, including emails, phone calls, and word-of-mouth recommendations. Advisory group members also shared recruitment materials with trainers. A total of 257 trainers completed the 29-question online survey, providing information on where and how they offered professional development and their use and understanding of Develop. Like the workforce survey, the trainer survey did not require respondents to answer questions, so rates of missing responses vary. Questions that all trainers had the option to answer had data missing at rates up to 8 percent; questions that only certain subsets of trainers had the option to answer had data missing at rates up to 94 percent. Missing data rates were highest at the end of the survey and were highest among non-users of Develop. Additional information regarding recruitment and missing data rates are available in the Technical Appendix.

The analysis plan included descriptive analyses of responses to each question and comparison of responses across the subgroups of Develop user types (non-users, minimal users, full users) using chi-square or analysis of variance (ANOVA) tests. Given the number of analyses and multiple comparisons, significant differences were determined by a threshold of  $p < .01$ .

## Results

Of 257 trainers who completed the survey, the majority reported using Develop to some degree (58 percent). Most trainers were full users (67 percent). As shown in Table 13, trainers most commonly reported working as individual consultants (56 percent), although many worked for nonprofit organizations (46 percent). More full users (63 percent) than non-users or minimal users reported working as an individual consultant. About a third of trainers indicated that they were also part of the child care and early education workforce (37 percent). Some trainers also noted that they offered training as part of another organization or agency, such as a state or county agency, or licensing.

**Table 13.** Trainer employment by Develop user type

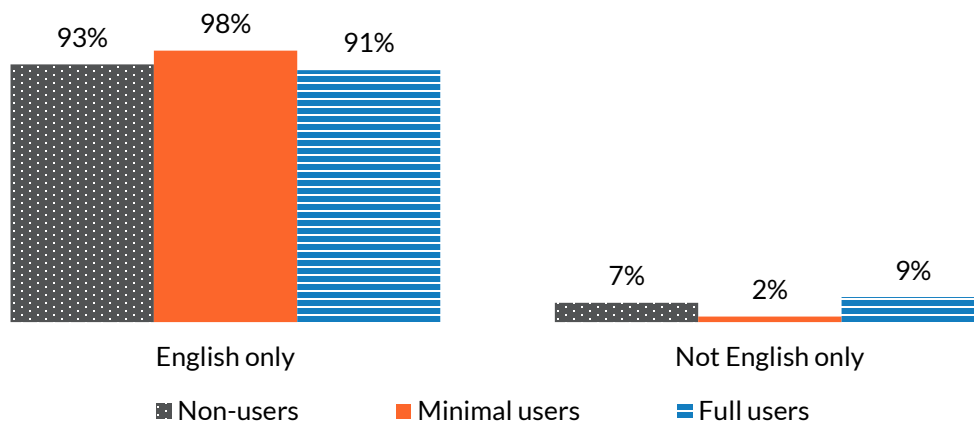
	Total sample (N = 220)	Non-users (N = 107)	Minimal users (N = 49)	Full users (N = 101)	Significant difference
Individual consultant	56%	37%	39%	63%	Full > Minimal, Non-user
Non-profit	46%	36%	37%	45%	No difference
For-profit	17%	13%	16%	16%	No difference
School	11%	8%	6%	12%	No difference
Other, open-ended	14%	12%	16%	10%	No difference

Source: Child Trends trainer survey data 2018

Note: Respondents could select all responses that applied.

Fewer than 10 percent of trainers offered professional development in a language other than English (Figure 12).

**Figure 12.** Percent of trainers offering professional development in English and not English only by user type



Source: Child Trends trainer survey data 2018

Key findings related to the research questions are highlighted below, and full responses can be found in the Technical Appendix.

### Trainers would be more likely to use Develop if it were easier to navigate.

The survey asked minimal users what would make them more likely to use Develop, and the largest percentage of respondents said they would use it more often if it were easier to receive course approval (40 percent). Other factors that would make trainers more inclined to use Develop included if it were easier to post training (31 percent) and/or if it were easier to become an approved trainer (26 percent). Very few Develop non-users answered this question (N = 4), so findings from non-users were not analyzed (Table 14).

**Table 14.** Factors that would make minimal users more likely to use Develop

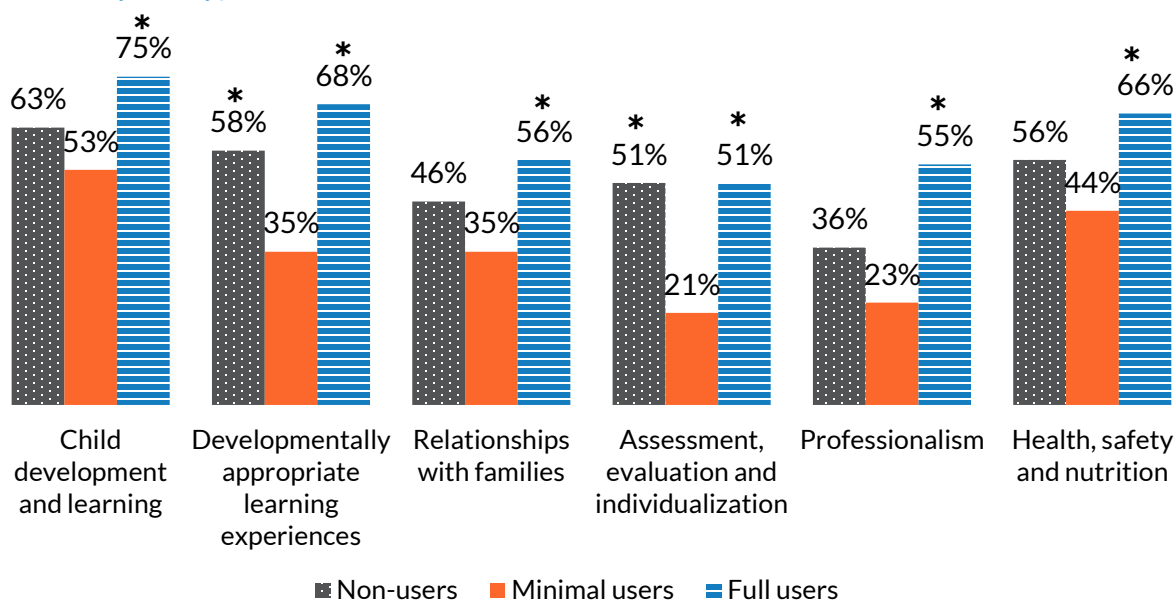
	Total sample	
	N	%
If it were easier to receive course approval	17	40%
If it were easier to post my available training	13	31%
If it were easier to become an approved trainer in Develop	11	26%
Other	10	24%
If I knew what it offered	8	19%
If it were easier to make an account	8	19%
If I knew it would bring more participants to my training	8	19%
I don't know	0	0%
<b>Total</b>	<b>42</b>	

Source: Child Trends trainer survey data 2018

Note: Respondents could select all responses that applied.

## Full users and non-users of Develop offered training across a wide range of content areas.

Trainers reported offering professional development training on all topic areas covered by Minnesota's [Knowledge and Competency Framework](#) (KCF). Full users, however, offered training across the most areas (Figure 13). A higher percentage of full users than other user types also offered training in each of the given KCF areas, except for the assessment, evaluation, and individualization area.

**Figure 13.** KCF areas by user type

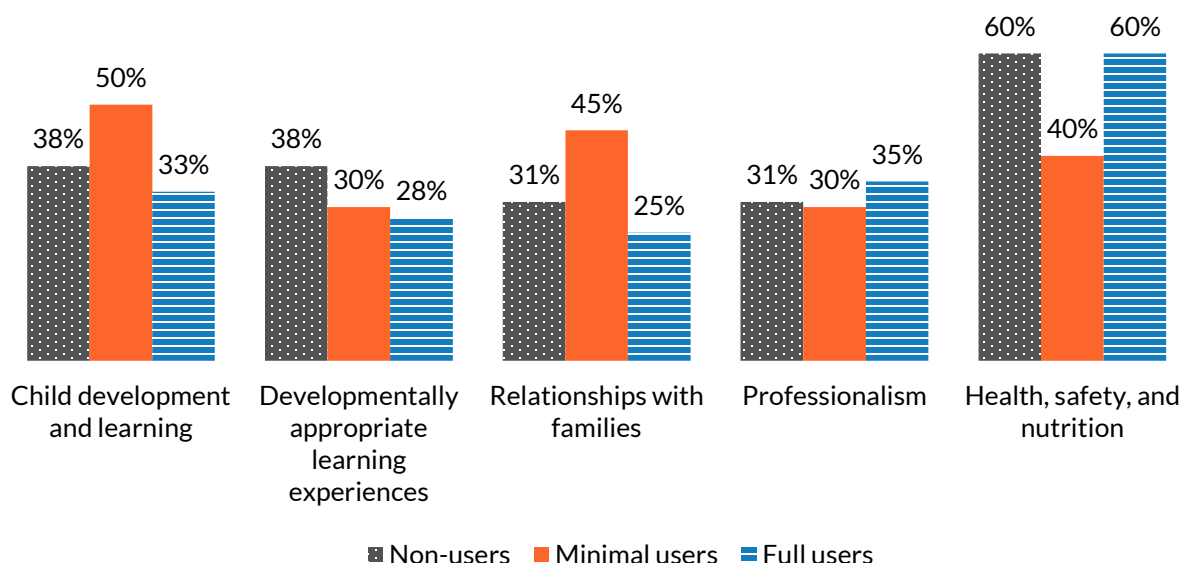
Source: Child Trends trainer survey data 2018

Note: Values with asterisks are statistically significantly different from values without asterisks within each response option.

Trainers also reported the KCF areas in which they offered free training. Because DHS funded an increased number of health, safety, and nutrition training in FY17 to meet federal requirements, analysis looked at whether free training was concentrated in this KCF area. In addition, analysis examined whether minimal users most often offered health, safety, and nutrition training, since they may have created an account specifically to offer training in these areas but not to actively use otherwise. Findings indicated that professional development trainers offered free training across the KCF areas—free training was not concentrated in the health, safety, and nutrition area. In

addition, more non-users and full users offered free training in this area than minimal users. Minimal users were most likely to report free training in the areas of child development and learning (50 percent) and relationships with families (45 percent) when compared with full and non-users (Figure 14).

**Figure 14.** Free training offered by Develop user type



Source: Child Trends trainer survey data 2018

Note. Sample sizes for subgroups within KCF area were too small to compare significant differences.

Nearly all trainers reported offering in-person training (91 percent) and about half reported offering training onsite and at workforce members' places of work (45 percent).<sup>5</sup> Full users of Develop were significantly more likely to offer internet-based training (including via Eager-to-Learn, the University of Minnesota's Center for Education and Development (CEED), the Center for Inclusive Child Care (CICC), and Pine Tech Child Care Aware) compared with other user types: 17 percent offered self-paced internet-based training and 22 percent offered internet-based training series with scheduled sessions (Table 15). In addition, one-quarter of trainers exclusively offered training online.

**Table 15.** Training formats offered by Develop user type

	Total sample (N = 246)	Non-users (N = 96)	Minimal users (N = 49)	Full users (N = 101)	Significant difference
In-person training (site other than the workplace)	91%	89%	92%	92%	
Onsite training (offered at the workplace)	45%	41%	39%	52%	
Internet-based training, self-paced (includes Anytime Learning)	13%	10%	8%	17%	Full > Minimal
Internet-based training series with scheduled/facilitated chat sessions led by an instructor	14%	9%	6%	22%	Full > Minimal, Non-user

Source: Child Trends trainer survey data 2018

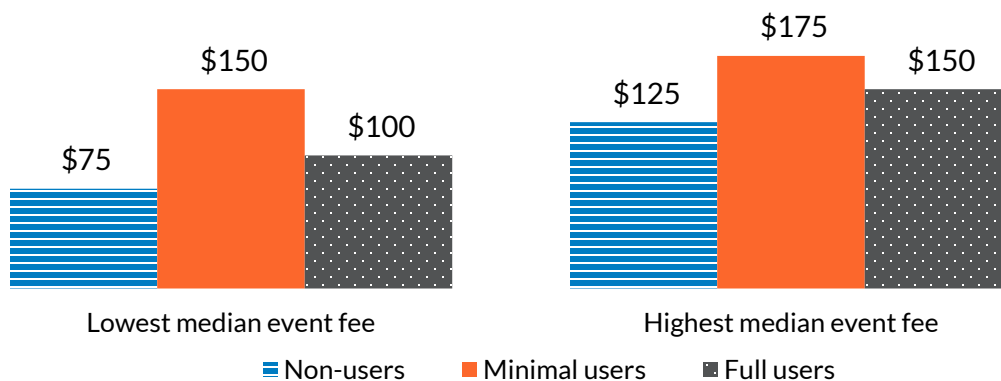
Note. Respondents could select all responses that applied.

<sup>5</sup> Trainers could select multiple training formats if they offered more than one.

## Trainers charged similar amounts for professional development across Develop user status. Multiple factors affect the cost of training.

The survey asked trainers to report the lowest hourly fee and highest hourly fee they charged for training. The median lowest hourly fee charged for training was \$10 and the median highest hourly fee was \$20. DHS subsidizes training through the Child Care Aware system, allowing costs to range from free to five dollars per hour, which may impact the range of fees reported by trainers. The survey also asked trainers the lowest and highest fees they charge per training event — trainers more commonly reported on prices per event than prices per hour. Trainers reported charging a median lowest total cost of \$75 per event and a median highest total cost of \$150 per event (Figure 15). Findings did not differ significantly across Develop user status.

**Figure 15.** Lowest and highest median event fee by Develop user type



Source: Child Trends trainer survey data 2018

Across all types of Develop users, trainers most commonly reported that the distance they needed to travel to deliver training was the primary factor affecting the cost of their training (Table 16). For non-users of Develop, the other two most common cost factors were training venue followed by the cost of training supplies. For minimal and full users, however, the next most common cost factors were the cost of training supplies followed by costs related to a trainer's expertise or certification to offer training. While trainers ranked their cost factors differently depending on user type, the overall percentage of respondents reporting each factor did not differ significantly across user type.

**Table 16.** Top three cost factors for training by user type

Rating	Non-users	Minimal users	Full users
Top cost factor	Distance (40%)	Distance (27%)	Distance (47%)
2 <sup>nd</sup> top cost factor	Venue (18%)	Supplies (21%)	Supplies (25%)
3 <sup>rd</sup> top cost factor	Supplies (16%)	Cost (23%)	Cost (21%)

Source: Child Trends trainer survey data 2018.

## Trainers advertise opportunities in similar ways regardless of Develop user status.

Develop was one of the top methods trainers reported using to advertise their training regardless of user status. Although higher rates of full users indicated using Develop to advertise training opportunities (92 percent), 77 percent of minimal users and 62 percent of non-users reported using it as well (Table 17). This indicates that although some trainers may not list events in Develop, many likely still are approved trainers and use Develop as an advertising platform. Approved trainers without events listed may appear in Develop when workforce members



search for training opportunities. Other commonly cited advertising outlets include informal word of mouth, social media, local child care resource and referral agencies, and other professional groups or organizations not listed on the survey, the most common of which was county licensors.

**Table 17. Most common advertising outlets by Develop user type**

	Non-users (N = 87)	Minimal users (N = 43)	Full users (N = 90)	Significant difference
Develop	62%	77%	92%	Full > Minimal, Non-users
Informal word of mouth	48%	49%	57%	
Local child care resource and referral agencies	23%	19%	44%	Full > Minimal, Non-users
Social media (e.g., Facebook ads)	20%	21%	38%	Full > Minimal, Non-users
Another professional group or organization	22%	30%	28%	

Source: Child Trends trainer survey data 2018

Note. Respondents could select all responses that applied.

Trainers also found Develop to be an effective marketing strategy regardless of user type. Full users found Develop to be much more effective than other strategies (Table 18). Three quarters said Develop was a top marketing strategy (75 percent), while fewer than 10 percent of trainers selected any of the other strategy options listed. Non-users, on the other hand, found both Develop and social media to be effective marketing strategies (39 and 21 percent respectively).

**Table 18. Most common marketing strategies by user type**

	Non-users (N = 80)	Minimal users (N = 40)	Full users (N = 87)
Develop	39%	45%	75%*
Social media	21%*	13%*	5%
Other	10%	10%	6%
Local schools	9%	5%	3%
CCR&R	4%	13%	2%

Source: Child Trends trainer survey data 2018

Note. Values that are statistically significantly higher than other subgroup values are noted with an asterisk. Respondents could select all responses that applied.

# Mapping the Supply of and Demand for Training

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## Purpose

To look more closely at geographically-based gaps in training coverage that may not have been captured by the survey, Child Trends mapped the location of all known trainers and workforce members. This analysis allowed for identifying professional development deserts or areas that would benefit from additional coverage by trainers.

## Methods

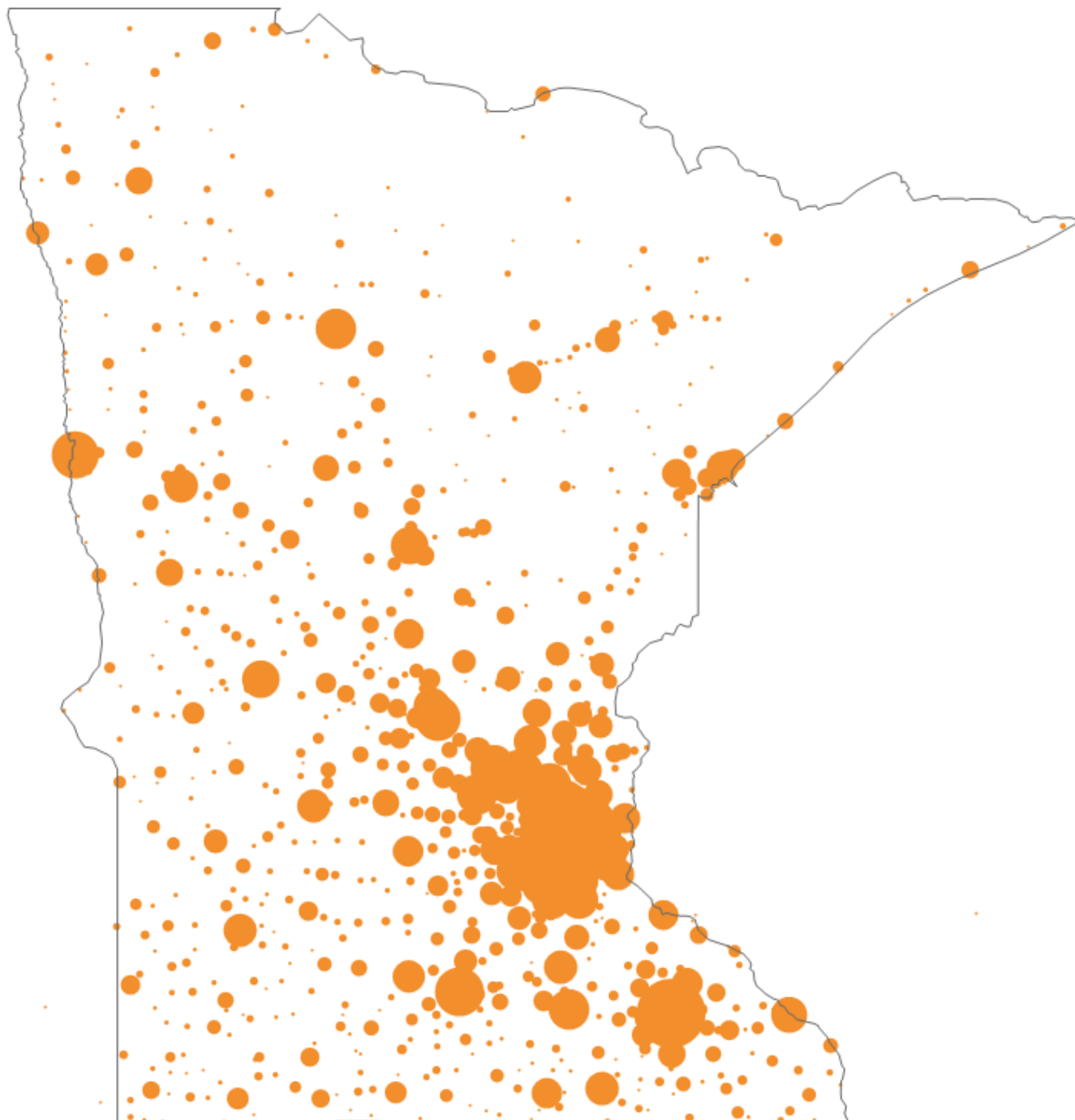
Using zip code information from Develop and from survey respondents who indicated they do not use Develop, Child Trends mapped the locations of all known trainers and all known child care and early education workforce members in Tableau, a data visualization software. The maps are scaled to represent the number of workforce members and/or trainers in each zip code with larger shapes indicating a greater number of workforce members and/or trainers in that area. Child Trends separately mapped the location of workforce members (i.e., the demand for professional development) and trainers (i.e., the supply of professional development). The trainer map is scaled in proportion to the workforce map at a ratio of 1:200. Child Trends also mapped the location of trainers and workforce members in a single map, and this map is scaled to the level of the workforce members.

Trainers also reported, in Develop and in the survey, the distance in miles they were willing to travel to provide training. Child Trends used this information to map the radius of available training. Full page maps of the supply of and demand for professional development are available in Figures 16-18.

## Results

Workforce members live and work throughout Minnesota, indicating a demand for training across the state (Figure 16). As expected, due to population, portions of the northeast district have the lowest demand.

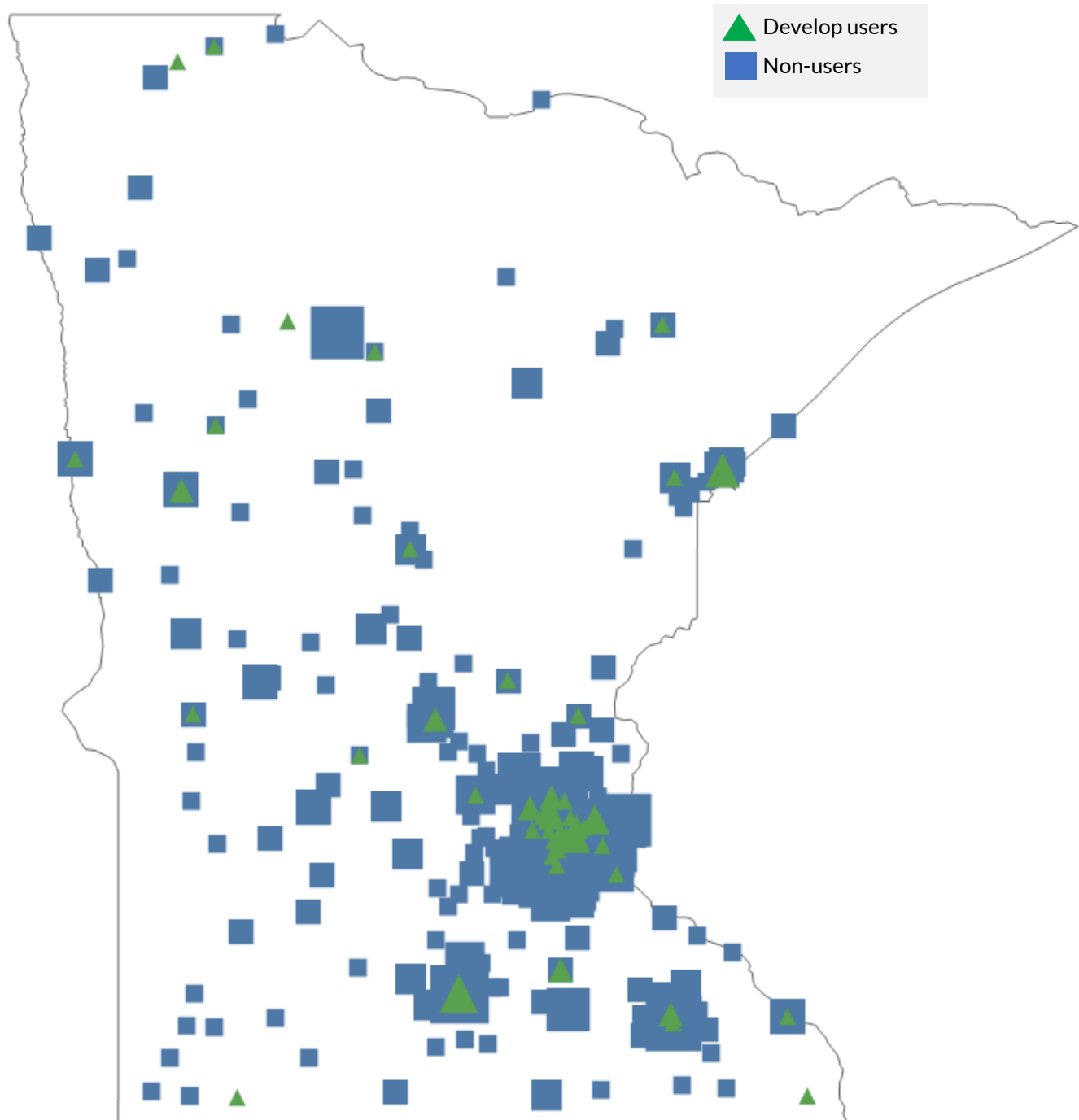
**Figure 16.** The demand for professional development: Locations of the workforce



Source: Develop, Minnesota's Quality Improvement and Registry Tool (February 2018); Child Trends workforce survey data 2018

On the supply side, professional development trainers offer training throughout the state, although fewer opportunities exist in the northeast and parts of the northwest district (Figure 17). Non-users of Develop, represented by blue squares on the map below, generally provide training in areas where Develop users live and work, so non-users do not fill gaps in coverage.

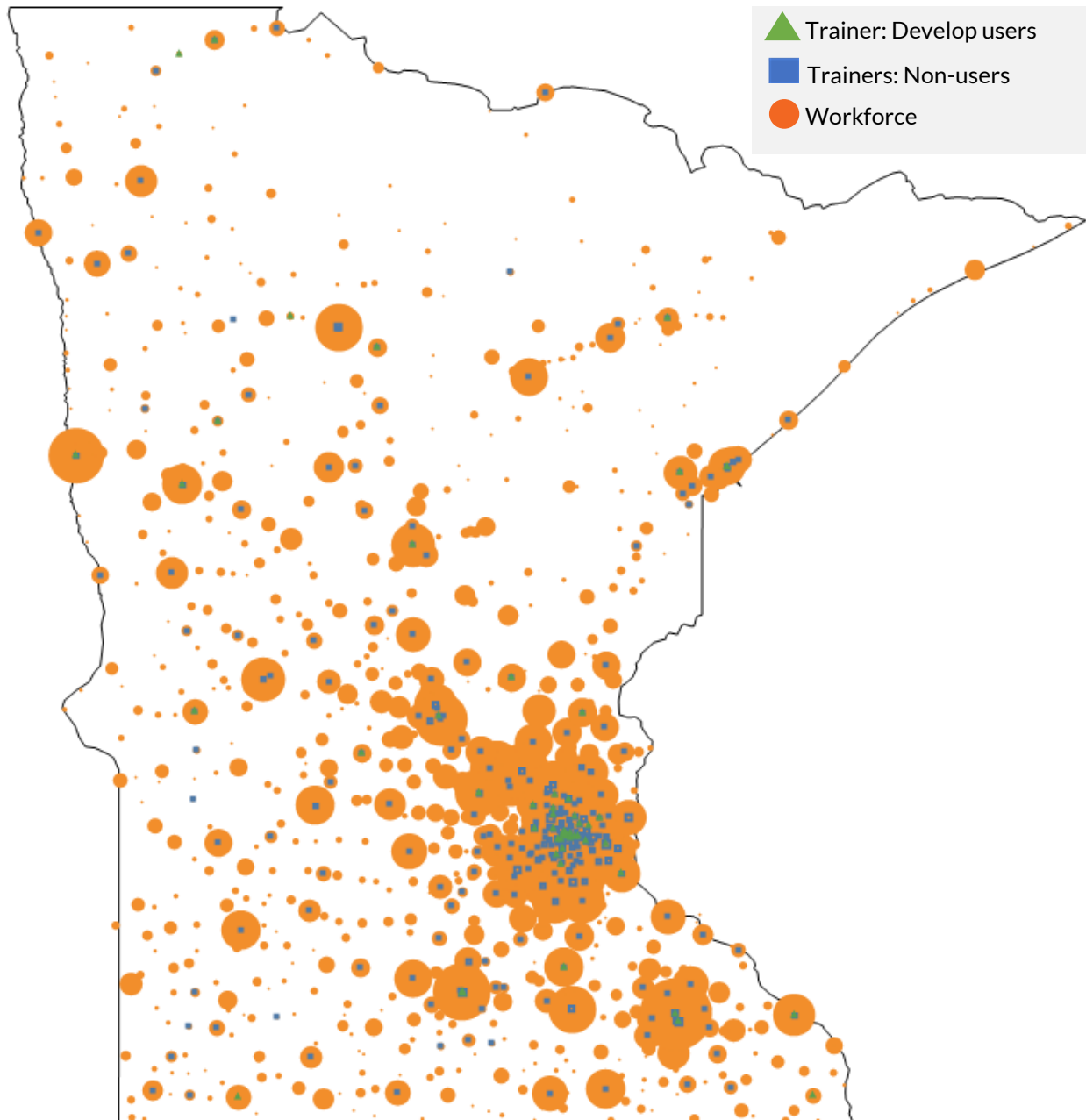
**Figure 17.** The supply of professional development: Locations of professional development trainers



Source: Develop, Minnesota's Quality Improvement and Registry Tool (February 2018); Child Trends trainer survey data 2018

Mapping the supply of and demand for professional development together, scaled to the number of workforce members in each zip code, indicates that there is more demand across the state for professional development than supply (Figure 18); however, areas with higher volumes of workforce members also tend to have higher volumes of trainers. Areas in the northern parts of the state and the far western parts of the state have the greatest gap between training demand and training supply.

**Figure 18.** The supply of and demand for professional development: Locations of the workforce and trainers



Source: Develop, Minnesota's Quality Improvement and Registry Tool (February 2018); Child Trends workforce survey data 2018; Child Trends trainer survey data 2018

Additionally, Child Trends used the information on distance willing to travel to map the radiuses of professional development provided by trainers. **When these data were mapped, the radiuses covered the entire state, meaning that there are no gaps in coverage based on how far trainers reported they were willing to travel.** Although this provides insight into potential locations where trainers offer professional development, trainers may not actually offer training in areas where they report being willing to travel. Trainers may most often remain in an area closer to where they live or typically work rather than traveling long distances to conduct training.

## Key Findings and Implications

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Analyzing administrative data, surveys, and geographic data from the child care and education workforce and professional development trainers provided insight on the use of Develop and on the supply of and demand for professional development throughout Minnesota. The following section highlights key findings for reducing barriers to Develop use and increasing equitable access to training for the state's child care and early education workforce.

### Most members of the child care and early education workforce and professional development trainers use Develop to some extent.

The majority of workforce members and trainers who responded to surveys reported using Develop. Among non-users, many still identified it as one way they find or advertise training. This indicates that non-users may still know about and access the system even if they do not use the system often or actively. Center-based providers who did not use Develop most often noted that they tracked their training in other ways or were not required by their employer to use Develop. Family child care providers, on the other hand, noted that they were not aware of the benefits of using the system. An awareness campaign to describe the benefits of Develop may help increase use of the tool. On the trainer side, minimal users reported that they struggled with receiving course approval or registering events, which indicates a need for more technical assistance. To achieve this, DHS could partner with stakeholders and licensing, who also use Develop as a source of information on the workforce and trainers.

### The child care and early education workforce considers Develop useful and easy to use.

A majority of workforce members and trainers considered Develop an easy-to-use tool for finding, tracking, and advertising training. Family child care providers in particular identified Develop as a helpful tool for tracking professional development records, although a majority of center-based providers also found it helpful for tracking professional development. This finding and the previous finding on frequency of Develop use indicate that Develop plays an important role in facilitating professional development for the child care and early education workforce across the state.

### Trainers sometimes use different venues to advertise professional development events than those commonly used by the workforce to search for training.

Although providers and trainers commonly use Develop to find and advertise training, there are some differences in where trainers advertise opportunities compared to where the workforce looks for training. Center-based and family child care providers often reported using their local CCR&R to find training opportunities, but few trainers indicated that advertising through CCR&R's brings participants to their training. In addition, only 5 percent of trainers who were full Develop users considered social media an effective strategy for marketing their training, but 17 percent of workforce members – Develop users and non-users – reported searching for training on social media. It was also common for the workforce to search for training by looking at upcoming conferences (27 percent), such as conferences hosted by Minnesota Association for the Education of Young Children (MNAEYC). Just 4 percent of



trainers, however, advertise their training through MNAEYC. This indicates some discrepancy in trainers' perception of effective marketing outlets and the workforce's use of different outlets to find training.

## **Family child care providers and providers in rural areas face different barriers to accessing professional development training than center-based providers and providers in the seven-county metro area.**

Family child care providers reported not accessing training due to the location of the training, a lack of new training options, and a lack of interest in available training topics at higher rates than center-based providers. Location and lack of new training options were also top barriers for rural providers and Develop users. Family child care providers, however, tended to fit into both groups — it is unclear if the barrier is faced by family child care providers and rural providers or if it is a barrier faced by family child care providers who tend to work in rural areas.

When asked to rank barriers to training, providers of all types identified the time it takes to participate in training, training cost, and training location as the biggest challenges. These factors are highly interconnected when it comes to the supply of and demand for training. Trainers indicated that they are willing to travel far to conduct training, but they also identified distance as the primary factor affecting the cost of training they offer. Geographic analysis demonstrated that trainers are not located throughout the state, indicating that they may need to travel long distances to reach the full workforce. Providers in the northwest district were most willing to travel long distances to access training, but costs associated with travel may still be prohibitive. Metro district providers, as expected, reported training location as a barrier less often.

## **Family child care providers reported having more trouble than their center-based peers in completing the professional development requirements for licensing, credentialing, or other standards.**

In addition to reporting more barriers to finding relevant professional development, family child care providers also found it less easy than center-based providers to take the training required for licensing, accreditation, and their early childhood education credentials. This finding reflects the unique challenges that family child care providers may face in accessing the training they need. For example, child care centers can guarantee enough participants will attend to hold customized training from their local CCR&R; individual family child care providers cannot do this, and local family child care associations may struggle to achieve high enough numbers depending on participation. Family child care providers may also face barriers including the time of day that training they have not yet taken is offered, the location of in-person training, or the cost of in-person training. For family child care providers, particularly given their prevalence in rural areas, flexibility in training format and content may help promote equitable access to professional development.

## **Center-based providers can often access training opportunities through their employers.**

A majority of center-based providers reported that their employer helped them find training and/or hosted training. In addition, a higher percentage of Develop non-users, which includes more center-based than family child care providers, reported having training set up by their employers and/or using coworkers and supervisors as resources for finding training. Centers often have an onsite staff member approved to offer licensed training or work with their local CCR&R to offer onsite training by an external trainer. DHS supplements funding for both of these training options. Since center-based providers often have less of a need to use Develop to find external training, they may also be less likely to actively use the system to track their training.

# Study Limitations

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While this study provides important insight into professional development offered in the state and barriers to accessing professional development, the following limitations should be considered when interpreting findings.

## Few workforce members with a language preference other than English completed the survey.

Child Trends conducted recruitment efforts aimed at non-English speaking center-based and family child care providers. These efforts included inviting representatives from organizations that work with multilingual or non-English speaking workforce members to the table for an advisory committee meeting. Ultimately, however, sample sizes were too small to conduct statistical analysis. To reach these individuals, Child Trends, with support from an external contractor and internal staff, translated the workforce survey into Spanish, Somali, and Hmong. Recruitment resources, including emails, postcards, and Facebook advertisements, were also translated. Child Trends staff emailed providers registered in Develop who listed Spanish, Somali, or Hmong as a preferred language. In addition, Child Trends shared materials with advisory committee members for dissemination. Finally, Child Trends used Facebook advertisements to target Spanish-speaking <sup>6</sup>providers who may not have been captured in Develop or who may not be formally connected with early childhood community organizations.

Despite these efforts, few providers surveyed reported preferring to receive training in languages other than English, and few providers took the survey in languages other than English. Further investigation of the supply of and demand for training for the early care and education workforce could explore other methods for gathering information on the training needs, preferences, and opportunities of this segment of the workforce.

## Other provider subgroups may not be fully represented in the data.

While surveys captured a large number of early educators, child care providers, and professional development trainers across the state, the number surveyed does not represent the full workforce. In addition to non-English speakers, it is likely that there are other groups of providers who are underrepresented in the data. Workforce members without access to the internet or with limited internet access, for example, would not have been able to participate in an online survey.

## Sample sizes fluctuated throughout the survey.

In the workforce survey and the professional development trainer survey, sample sizes for early questions exceed sizes for later questions. Because this was a voluntary survey, respondents were not required to answer the questions as they moved through the survey. To gather as much information as possible on each dimension of the research questions, analysis did not omit participants who responded to only some of the survey questions.

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<sup>6</sup> Facebook does not include Somali or Hmong on its list of languages for targeting advertising audiences.

# Recommendations

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## Market Develop to center directors to increase use among the workforce.

More family child care providers than center-based providers used Develop, and center-based providers most often indicated not using Develop because they tracked their training in other ways or their center did not require it. To expand the use of Develop, DHS should consider ways to market Develop to center directors, who are tasked with ensuring that their staff meet training and education requirements and have opportunities for professional development. Strategies to achieve this include partnering with other DHS entities or stakeholder groups that work more closely with center-based providers.

## To increase the use of Develop among trainers, further market and expand the technical supports offered to trainers.

Trainers who did not use Develop frequently struggled with getting their courses approved in the system, posting training opportunities, and receiving trainer approval. A majority of trainers not using Develop still view it as an effective advertising outlet and marketing strategy, indicating that they may be interested in more actively using the system if they better understood how to navigate it and had increased support for getting courses approved and registering events. The current Achieve website includes interactive resources to support Develop use, including user guides, quizzes, and short videos with step-by-step instructions. In addition to these resources, trainers have access to helpdesk features and referrals to additional one-on-one supports. Findings on continued issues with navigating and using Develop, however, indicate a need for increasing awareness of these services and expanding available resources. DHS could achieve this through partnering with stakeholders to market or share information about Develop support services more broadly and intensively. In addition, adding further supports – for example, additional instructional videos targeting areas where users experience common technical issues – may help to expand use.

## Take steps to reduce perceived and demonstrated barriers to accessing training.

### Enhance existing online training opportunities.

A majority of center-based and family child care providers identified online training as one preferred method for taking professional development training, and many reported taking training from Eager-to-Learn. Online training can be a cost-effective way to offer opportunities to providers living in areas with a low concentration of local trainers. In addition, online training can be a particularly useful tool for ensuring family child care providers – many of whom work outside the metro area and who do not have access to onsite training provided by an employer – have equitable access to training opportunities. To increase use of online training, including training offered through Eager-to-Learn, the University of Minnesota's Center for Education and Development (CEED), the Center for Inclusive Child Care (CICC), and Pine Tech Child Care Aware, DHS could examine the variety and novelty of available training content and consider additional marketing strategies to promote use. Since most providers also identified in-person training as a preferred method, consider adopting 'hybrid' training models in which participants attend part of the training in-person and complete the rest online. This strategy could also reduce training costs.

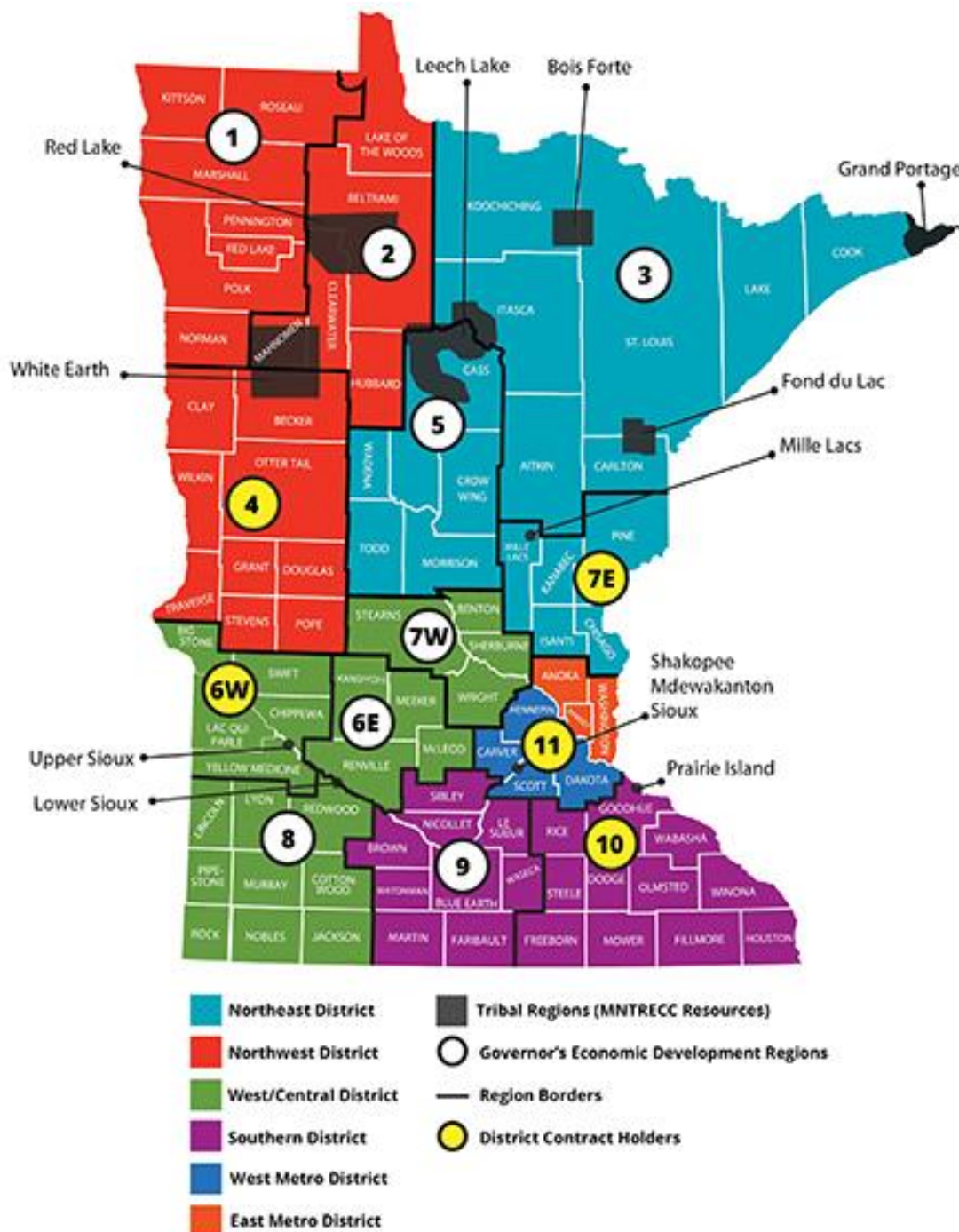
## **Offer training on a wide range of topics, especially for family child care providers.**

Family child care providers commonly reported that they did not take training because they had already participated in the available training options and/or were not interested in the content. To ensure a wider range of available training, DHS could use administrative data on training titles to examine variety across KCF areas. In addition, DHS could take steps to solicit more feedback on training. Since spring 2017, any training offered in Develop has included an evaluation tool sent to participants after completing the training. DHS has just begun to use this data, and further exploration will provide information on perceptions of training content. Requirements for licensing can limit training topics in some areas; for example, all providers must take training on first aid and CPR. There may be other professional development topics, however, where trainers could offer a wider range of training that covers diverse subtopics.

## **Identify ways to incentivize trainers to offer opportunities in areas where they are willing to travel but may not travel consistently.**

Although trainers reported being willing to travel to areas throughout the state, the child care and early education workforce identified training location as a top barrier to access. In addition, trainers identified distance as the primary factor affecting the cost of their training sessions. Child Care Aware currently offers occasional financial support for mileage and hotel options for trainers willing to travel; however, findings indicate that trainers may not be aware of these resources or that these resources are not sufficient. Increasing awareness of these resources or expanding available resources could help facilitate more trainer travel. Alternatively, DHS could consider ways to support workforce members with the costs of attending training farther away or bringing trainers to their area.

# Appendix A: Child Care Aware Districts



Source: Child Care Aware of Minnesota. Map of Child Care Aware districts in Minnesota. <https://www.childcareawaremn.org>

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