

What Parents Want: A survey of the preschool preferences of households in the City and County of Denver

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Executive Summary

As an operating foundation, The Piton Foundation collaborates with others to conduct and disseminate relevant research, develop initiatives, and improve public systems and institutions that serve low-income families. Piton's work includes building public will around the importance of early childhood education and investing in the early years of a child's life.

In November 2006, Denver voters approved a ballot initiative to provide parents with a tuition credit to use at the preschool of their choice. The program is administered by the Denver Preschool Program. DPP was the result of efforts supported by The Piton Foundation, working with Denver city officials and business and community leaders, to raise awareness about the importance of early childhood education and to increase the number of preschool slots in Denver. The results of this new funding source will be more families in Denver enrolling their children in quality preschool. Given the increased supply of preschool dollars, Piton wanted to understand and inform others about the demand for early childhood education, and what families in Denver value when selecting a preschool program.

Piton contracted with a local research firm in the spring of 2008 to conduct a telephone survey with households in the City and County of Denver with at least one child enrolled in preschool. The instrument was translated into Spanish and native Spanish-speaking interviewers were available to conduct interviews in Spanish. Survey responses were weighted according to Census data so the sample would reflect the larger population of families in Denver with at least one child in preschool.

Of the 700 families interviewed, just over half were Hispanic, 50% had a high school degree or less, 25% earned less than \$25,000 a year while 20% earned \$25,000 to \$50,000 a year. Three-quarters identified English as the primary language spoken at home. The majority of respondents were female and married.

Selecting a preschool program is a complex decision that involves weighing costs and benefits. This decision also is filtered through families' needs and values, and influenced by realities such as cost and convenience. A review of national data on preschool childcare trends and an analysis of the Denver survey results surfaced the following five key factors impacting parental preschool preferences in Denver.

1. Quality is an essential factor in determining a preschool program. The most important factor for parents in choosing a preschool is that the teachers are certified in early childhood education. Programs that emphasize academics, art and music also are essential criteria. These considerations were even more important than location, schedule and cost.

2. Most parents want the option of a full-time preschool program. Quality was clearly the most essential factor in selecting a program. Still, the majority of Denver households use the child's preschool program as the sole provider so the parents or guardians can work or attend school or training. For these families, schedule also is important. Just over half (53%) of households in Denver said their preschool program offers full-time preschool (defined as at least 36 hours a week, Monday through Friday). More than one-third (36%), however, said their program does not offer full-time care. National data suggest that such an arrangement requires single parents, or two-parent households with both caregivers working full-time, to use additional child care arrangements. This could explain why 29% of Denver households have one other primary provider, in addition to the child's preschool program. For those families in Denver attending a program where full-time is not available, if offered, almost half would choose this option.

3. Extended hours beyond the typical workday are not in high demand. Most children in Denver attend preschool five days a week. More than half of all households, however, said their child is "never" in school between the hours of 6 am and 8 am. Three-quarters said they child is "never" at preschool between 4 pm and 7 pm. Nearly half (45%) of Denver's children attend school 15 hours a week or less. Meanwhile, 43% attend between 16 and 40 hours a week. Only a small percentage of children (6%) attend preschool more than 40 hours a week. These data are consistent with national figures. The highest U.S. average for the number of hours spent in an arrangement by preschoolers of employed mothers was 34 hours.

4. Most households enroll their children in preschool during the traditional school calendar. The survey did not address why parents choose this schedule. Anecdotal evidence, however, suggests that this decision could be influenced by: 1) whether preschool children have older siblings who are not in school over the summer; 2) whether households can afford year-round preschool; and 3) whether more options for alternative care arrangements exist during the summer months. More research is needed to understand where children in Denver who attend preschool spend time over the summer.

5. Cost is a barrier for many families in securing the preschool of their choice. Roughly one-fourth of the households surveyed pay nothing for their child's preschool tuition. Another 24% pay \$250 a month or less. Still, nearly 40% said that the cost of preschool prevented them from getting the kind of program they wanted. National data indicate that low-income families were less likely to pay preschool tuition than households not in poverty. Denver households that qualify for government agency programs claim such tuition assistance is essential to their ability to work and have access to a quality preschool program for their child.



Table of Contents

Introduction	1
Purpose	1
Background	1
Survey Design	1
Weighting the Data	2
Sample	2
National Comparisons	2
Results	2
Selecting a preschool program	2
Preschool arrangements	3
Preschool schedule	4
Paying for preschool	5
Summary and Conclusion	6
Appendix A – Weighting Scheme	7
Appendix B – Survey Methods	8
Appendix C – Understanding the Results	9
Sample Size and Precision of Estimates	9
Rounding	9

Introduction

The mission of The Piton Foundation is to provide opportunities for children and families to move from poverty and dependence to self-reliance. As an operating foundation, Piton collaborates with others to conduct and disseminate relevant research, develop initiatives, and work to improve public systems and institutions that serve low-income families. The Foundation's areas of interest are improving pre-kindergarten through high school education, expanding economic opportunities for families, and strengthening lower-income communities. Piton's work involves building public will around the importance of early childhood education and investing in the early years of a child's life.

Purpose

In November 2006, Denver voters approved ballot issue 1A, Preschool Matters, to provide parents with a tuition credit to use at the preschool of their choice. The program is administered by the Denver Preschool Program, Inc., an independent, non-profit organization that was created for the sole purpose of operating the Denver Preschool Program (DPP). DPP provides preschool tuition credits to families based on their income and the preschool's quality rating. Funds also go to preschool providers for quality improvements. DPP was the result of efforts supported by The Piton Foundation, working with Denver city officials and business and community leaders, to raise awareness about the importance of early childhood education and to increase the number of preschool slots in Denver. The

results of this new funding source will be more families in Denver enrolling their children in quality preschool. Given the increased supply of preschool dollars, Piton wanted to inform child care providers, as well as the larger community, about the demand for early childhood education, and what families in Denver value when selecting a preschool program.

Background

Between February and March 2008, The Piton Foundation contracted with the National Research Center, Inc. to conduct a 15-minute, 40-item telephone survey on the demand for preschool in Denver. The interviews included 700 households in the City and County of Denver with at least one child who was either currently enrolled in preschool or would be enrolled in the fall of 2008. Telephone survey data were collected using a listed sample of households thought to have a higher probability of at least one child who currently was or would be of preschool age by the next school year. The survey instrument was translated into Spanish and native Spanish-speaking interviewers were available to conduct interviews in Spanish.

Survey Design

The Piton Foundation adapted survey items from a parent questionnaire developed by the Midwest Child Care Research Consortium¹ to assess the child care workforce, including quality and parent perceptions, across four Midwestern states and state child care divisions. Piton then assembled an expert panel to provide input on these adapted items. This panel consisted of local individuals with expertise in early care and education, parent advocacy, policy and survey design.

Individuals who served on the expert panel assembled to provide input on the survey items.

Susan Gallo, Ph.D. <i>Deputy Director Mayor's Office for Education and Children City and County of Denver</i>	Will Lee-Ashley <i>Strategy Manager Denver Public Schools</i>
Pamela Harris, Ph.D. <i>Chief Operating Officer Denver Preschool Program</i>	James Mejia <i>Chief Executive Officer Denver Preschool Program</i>
Shannon Hayden <i>Senior Research Associate National Research Center</i>	Lisa Roy <i>Early Childhood Education Program Officer (as of July 2008) The Piton Foundation</i>
Lucia Horton <i>Family Services Manager Rocky Mountain SER Head Start</i>	Patsy Roybal <i>Consultant</i>
	David Suppes <i>Chief Strategy Officer Denver Public Schools</i>

¹The Midwest Child Care Research Consortium is a Child Care Partnership funded by the Child Care Bureau, U.S. Department of Health and Human Services, Administration on Children, Youth and Families and the Ewing Marion Kauffman Foundation. Researchers from the Consortium and program officers in state departments work together to define issues relating to quality and the nature of the workforce, design research to assess key questions and interpret findings.

Weighting the Data

The demographic characteristics of the survey sample were compared to the population norm of Census data for households within the City and County of Denver who have at least one preschool aged child enrolled in preschool. Survey responses were weighted so the sample would reflect the larger population of families in Denver with at least one child in preschool. All survey responses were analyzed using the weighted data. See Appendix A for more information on this weighting scheme.

Sample

Of the 700 families interviewed, 67% had at least one child enrolled in preschool at the time the survey was conducted. In addition, 51% of the 700 families said they would have a child enrolled in preschool in the fall of 2008. Just over half were Hispanic, 50% had a high school degree or less, 25% earned less than \$25,000 a year while 20% earned \$25,000 to \$50,000 a year, and three-quarters identified English as the primary language spoken at home. The majority of respondents were female and married.

Demographic characteristics of survey sample

Characteristic	Percent of respondents
Is the child/ren's primary caregiver or guardian Spanish, Hispanic or Latino?	
Yes	53%
No	47%
*Race of the child/ren's primary caregiver or guardian	
American Indian or Alaskan Native	3%
Asian, Asian Indian or Pacific Islander	2%
Black or African American	5%
White	46%
Other	37%
Don't know/refused	9%
Language household speaks most often at home	
English	76%
Spanish	15%
Both English and Spanish	9%
Marital status of the caregivers or guardians	
Single	17%
Married, including common law	77%
Separated, Divorced or Widowed	6%
Respondent's gender	
Female	61%
Male	39%
Caregiver who contributes the most to the household's income	
Employed (either full or part-time)	85%
Not employed	12%
Don't know/refused	3%
<i>*Note: Percents may total to more than 100% as respondents were allowed to give more than one answer.</i>	

National Comparisons

This report draws on findings from the Survey of Income and Program Participation (SIPP), a survey conducted by the US Census Bureau with over 37,000 households, to provide national comparison data and (where possible) put the results in a larger context. The Child Care Topical Module, administered as part of the SIPP to parents of children under 15 years, includes numerous child care questions. Based on the SIPP child care data, the US Census Bureau developed the *Current Population Reports: Who's Minding the Kids?*² The report provides a national and regional estimate of child care arrangements and family characteristics. The most recent report was issued in October 2005 using data from winter 2002.

Results

Findings presented in this section describe the patterns and use of child care for preschoolers in Denver. Information also is provided on how families select a preschool program, and what they pay for their preschool program. Descriptive results for each individual survey response are available in Appendix D, a separate document. Appendix D, "Descriptive results for each survey question," is available on The Piton Foundation's web site, at www.piton.org in the publications section.

Selecting a preschool program

Most (91%) respondents said the mother was responsible for selecting the preschool program. Just under half (45%) identified the father as being involved in this decision.³ While location, program affordability, and hours were important factors influencing parents' decisions, staff quality or program academics were the most essential considerations.

Parents overwhelmingly want programs that emphasize academics, like reading and math. They also prefer programs that put emphasis on art, music and pretend play. A key staff characteristic that parents find essential is whether teachers are certified in early childhood education. What particular curriculum the preschool uses, for instance Montessori or dual language, mattered less. Regarding setting, parents slightly prefer a preschool program in a building that serves children five years or younger to a program located in a kindergarten through fifth grade elementary school.

²US Census Bureau Current Population Reports "Who is Minding the Kids", Winter 2002 (issued in October 2002): <http://www.census.gov/prod/2005pubs/p70-101.pdf>

³Percents totaled more than 100% as respondents were allowed to give more than one answer to this question.

How important is each of these features in choosing your child's preschool program:

% answering "essential" or "very important"

- Staff quality and characteristics – 94%
- Program type or features – 89%
- Affordable cost – 71%
- Convenience of location – 70%
- Flexibility of schedule – 60%

Considering these "program type or features," how important is each:

% answering "essential" or "very important"

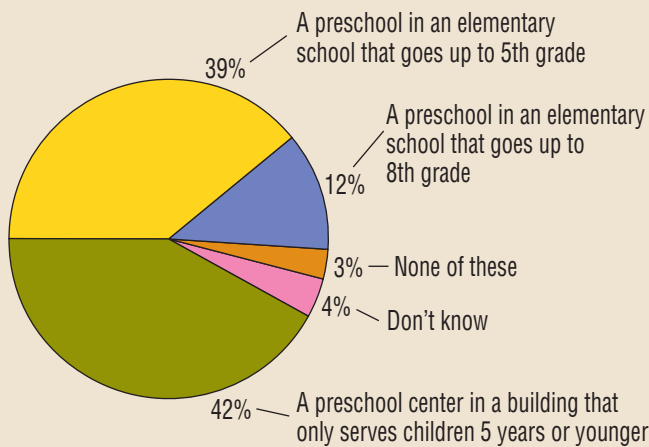
- Program emphasizes school academics, for example, reading and math – 86%
- Program emphasizes creativity in art, music, theater and pretend play – 85%
- Preschool curriculum, for example, Montessori, Dual Language, etc. – 71%
- Program teaches mixed-age groups, with ages three to five in one classroom – 50%

Considering "staff quality and characteristics," how important is each of the following:

% answering "essential" or "very important"

- Teachers have certification in early childhood education – 86%
- Low rate of teacher turnover or changes in staff – 74%
- Languages of the teacher(s) matches yours – 65%
- Race or ethnicity of the teacher(s) matches yours – 18%

Which preschool setting would you most prefer?

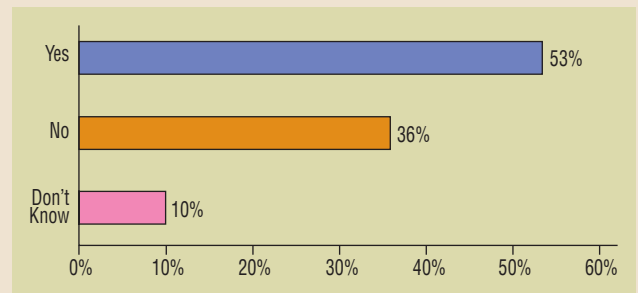


Preschool arrangements

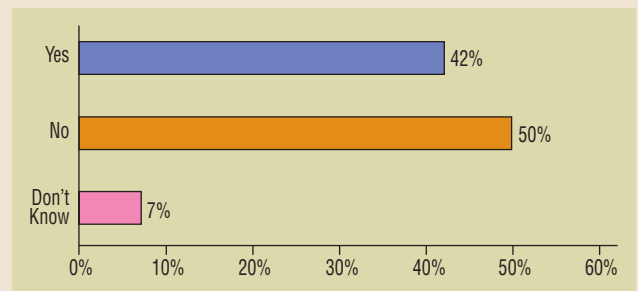
While quality is an essential factor for parents in selecting a preschool program, schedule is still important. On a typical week, the majority (62%) of the Denver families surveyed use the child's preschool program as the sole provider so the parents or guardians can work or attend school or training. Nearly one-third (29%) have one other primary provider, in addition to the child's preschool program. This statistic is slightly higher than the national average, where as of the winter of 2002, 22% of preschoolers of working mothers were in multiple (two or more) child care arrangements.

As the "Who is Minding the Kids?" publication points out, the need for multiple child care providers often stems from providers that offer half-day care only. Such an arrangement would require single parents, or two-parent households with both caregivers working full-time, to use additional child care arrangements. Just over half (53%) of households in Denver interviewed said their program offers full-time preschool (defined as at least 36 hours a week, Monday through Friday). Of the 36% whose preschool program does not provide full-time programming, if offered, almost half (42%) would choose it. This finding indicates that parents in Denver want the option of full-time preschool.

Does your child's preschool program offer full-time care (at least 36 hours a week, Monday-Friday)?



***If offered, would you choose a full-time preschool for your child?**



**Asked of the 36% who responded that their preschool program does not offer full-time care.*

Preschool schedule

The amount of time young people are enrolled in preschool sheds light on how and with whom children spend their day. In winter 2002, national statistics reveal that preschool-aged children of working mothers spent an average of 28 hours per week in non-parental child care. Meanwhile, children of non-working mothers spent roughly 18 hours a week in preschool. According to results of the Denver survey:

- Nearly half (45%) of children in Denver attend preschool 15 hours a week or less;
- Around one-third (32%) have a child enrolled in preschool 16 to 35 hours a week; and
- Six percent attend more than 40 hours a week.

Since the Denver survey did not analyze the responses by mother's level of employment, a comparison to national averages is difficult. However, given the number of children in Denver who attend preschool less than 15 hours a week, it seems likely that many households have non-working mothers.

Most families in Denver (59%) send their child to preschool five days a week, Monday through Friday. An additional 13% of the households have a child attending preschool four days a week. When asked the time of day most children typically attend preschool, 52% said their child is "never" in school between 6 am and 8 am. In addition, 73% said their child is "never" at school between 4 pm and 7 pm. These findings indicate that extended preschool hours beyond the typical work day are not in high demand in Denver. These data are consistent with national figures. The highest U.S. average for the number of hours spent in preschool for children of working mothers was 34 hours.

Thinking about your [child/ren]'s fall 2008 preschool program, on most days each week will they usually be there...	Between 6am and 8am?	Between 4pm and 7pm?
Never/zero days	52%	73%
1-2 days, Monday through Friday	8%	3%
3-4 days, Monday through Friday	10%	6%
5 days, Monday through Friday	23%	12%
Don't know	6%	5%
Refused	1%	1%

The survey also asked the number of months a year children attend school. Results show that most households in Denver enroll their children in preschool during the traditional school calendar:

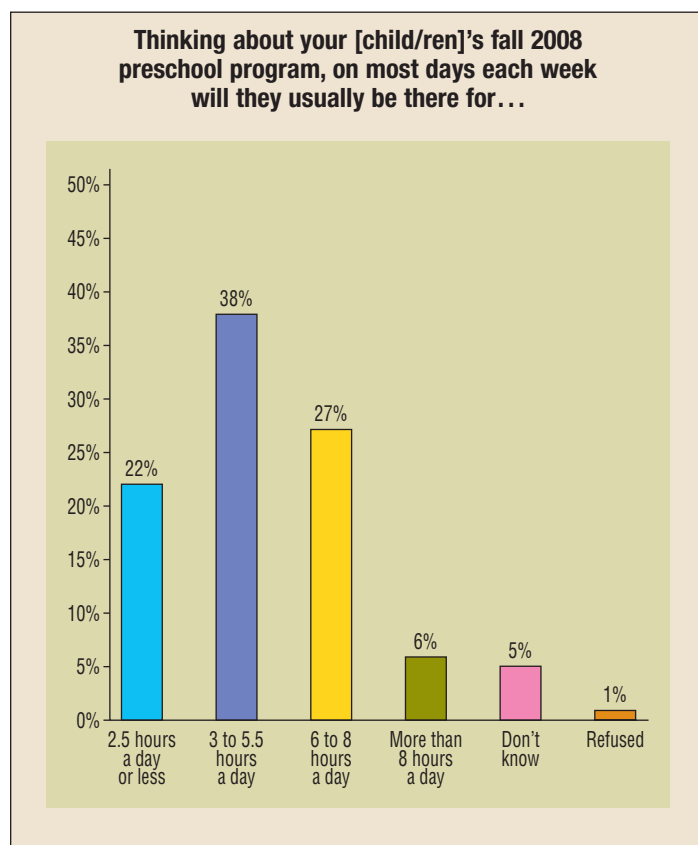
- 64% attend preschool during the school year only (off in the summer)
- 24% attend preschool year-round (12 months a year)

- 6% use the year-round school calendar, which means off three months of the year but not necessarily during the summer

The survey did not address why parents choose this schedule. Anecdotal evidence, however, suggests that this decision could be influenced by: 1) whether preschool children have older siblings who are not in school over the summer; 2) whether households can afford year-round preschool; and 3) whether more options for alternative care arrangements exist during the summer months.

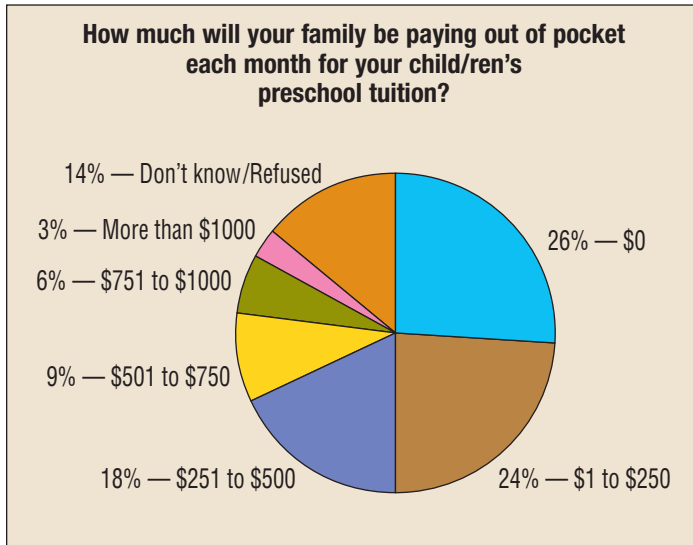
After interviewing households about their child's preschool schedule, the survey found the vast majority of families are satisfied with their arrangement.

- 93% feel the schedule fits the need of their preschool-aged child
- 92% feel the schedule fits the needs of the family



Paying for preschool

A majority of households surveyed (59%) will have one child not yet in kindergarten for which they will be paying childcare in fall 2008. Nearly 30% will pay childcare for two children. Still, roughly one-fourth of the households surveyed pay no tuition for their child's preschool tuition. Another 24% pay \$250 a month or less. Findings from the "Who is Minding the Kids?" report help explain this.



According to the publication, households with mothers who work full-time are more likely to pay for preschool tuition than households with mothers who work part-time or who do not work. In addition, households with two or more children were more likely to pay preschool tuition than those with one child in preschool. Finally, low-income families were less likely to pay for childcare than households not in poverty. Half of the Denver sample was low-income. Fifty percent had less than a high school education. One-quarter made less than \$25,000 and another 20% made between \$25,000 and \$50,000.

There is a complex system in Denver (and Colorado) that provides funding to encourage preschool enrollment for low-income families. Public funding streams in Denver include state or federal programs, such as the Colorado Preschool Program (CPP), Colorado Child Care Assistance Program (CCCAP), and Head Start. In addition to these subsidies, access has recently been increased by the Denver Preschool Program (DPP), which provides parents who live in Denver with a tuition credit to use at the preschool of their choice. When asked what potential funding sources households planned to use to help pay for preschool tuition in fall 2008, 39% said they would receive CCCAP, CPP or DPP funding (12% responded "don't know" to this question). In addition, 37% planned to attend a Head Start program⁵. Follow-up questions were asked of the 12% who qualify for and plan to use CCCAP. Seventy-three percent of these households said CCCAP is a "tremendous boost to our family's ability to work and make a living;" 71% said "I feel I have more preschool options because of CCCAP;" and 68%

reported that "I feel I had access to the highest quality preschool program because of CCCAP."

Other strategies used to help families afford preschool include:

- Claiming a federal income tax credit for child care expenses = 56% (7% either did not know or refused the question)
- Receiving the Earned Income Tax Credit = 49% (13% did not know or refused the question)
- Using a plan through an employer to pay for preschool tuition with before-tax dollars = 24% (6% did not know or refused the question).

Program affordability, however, is still an issue for many families in Denver. Nearly 40% said that the cost of preschool prevented them from getting the kind of program they want for their child. Thus, while access to preschool has been improved through many public and private funding sources, cost is still a barrier for many parents when it comes to securing the preschool of their choice.

Please tell me the extent to which you agree or disagree with the following statement about the affordability of preschool.	
The cost of preschool has prevented me from getting the kind of preschool program I want for my child	
Strongly agree	23%
Somewhat agree	16%
Somewhat disagree	20%
Strongly disagree	39%
Don't know	3%

⁵The percent of households claiming to receive tuition assistance through public funding sources may undercount the actual percentage of recipients if households are unaware that their tuition is subsidized due to their income level or participation in other programs.

Descriptions of the public funding streams available to encourage preschool enrollment for low-income families in Denver.

Colorado Preschool Program (CPP) — CPP began in 1988 when it was authorized by the Colorado General Assembly in recognition of the need to adequately prepare children with specific at-risk factors to learn. CPP serves children who lack overall learning readiness due to individual and family risk factors. Funding is provided for children ages four or five years old who are eligible for kindergarten the next year. A three year old also may be served in CPP if the child lacks overall learning readiness attributable to at least three significant family risk factors. The number of children who can be served in CPP is capped at a level set by the State Legislature. Only 5% of CPP slots can be used to fund a child using two slots (or, in other words, to extend a half-day slot for one to child to a full-day slot). Children are automatically eligible for CPP funding if they are receiving services from the State Department of Human Services as neglected or dependent children. If a child has an Individual Education Plan (IEP) and qualifies for services from special education, that child can not be funded under CPP.

Colorado Child Care Assistance Program (CCCAP) — CCCAP provides financial assistance to low-income families that are working, searching for employment or who are in training, and to families that are enrolled in the Colorado Works Program and need child care services to support their efforts toward self-sufficiency. CCCAP is administered through county departments of social services under the direction of the Colorado Department of Human Services, Division of Child Care. Counties set eligibility for families, but must serve families that have income of 130% or less of the federal poverty guideline and may not serve families that have income of over 225% of the federal poverty level. In Denver, the Denver County Department of Health and Human Services Child Care Assistance Program (CCAP) administers the program. Denver CCAP works with about 500 providers in Denver. In 2007, CCAP enrollment averaged 4,850 children statewide per month, and 2,300 families in Denver.

Head Start — Head Start is a program of the U.S. Department of Health and Human Services that focuses on assisting children from low-income families. Created in 1965, it provides comprehensive education, health, nutrition, and parent

involvement services to low-income children and their families. Eligibility is largely income-based (100% of the federal poverty level), though each locally-operated program includes other eligibility criteria such as disabilities and services to other family members. As of late 2006, up to 10% of any funded program's enrollment can be from families that do not meet the income requirements.

Denver Preschool Program (DPP) — Approved by Denver voters in November 2006, DPP provides parents that live in Denver with a tuition credit to use at the preschool of their choice. It is open and voluntary for all Denver children in their last year of preschool before kindergarten and is available to all licensed preschool providers who agree to participate in a quality improvement system. As part of enrollment in DPP, providers are eligible for technical assistance and funding for quality improvement. DPP is available to all licensed preschool providers, including those that are home-based and Spanish-speaking. Tuition credits are available to all Denver families regardless of the location of the preschool.

Summary and Conclusion

Selecting a preschool program is a complex decision that involves weighing costs and benefits. This decision also is filtered through families' needs and values, and influenced by realities such as cost and convenience. A review of national data on preschool child care trends and an analysis of the Denver survey results surfaced the following five key factors impacting parental preschool preferences in Denver.

1. Quality is an essential factor in determining a preschool program. The most important factor for parents in choosing a preschool is that the teachers are certified in early childhood education. Programs that emphasize academics, art and music also are essential criteria. These considerations were even more important than location, schedule and cost.

2. Most parents want the option of a full-time preschool program. Quality was clearly the most essential factor in selecting a program. Still, the majority of Denver households use the child's preschool program as the sole provider so the parents or guardians can work or attend school or training. For these families, schedule also is important. Just over half of households in Denver said their preschool program offers full-time preschool (defined as at least 36 hours a week, Monday through Friday). More than one-third, however, said their program does not offer full-time care. National data suggest that such an arrangement requires single parents, or two-parent households with both caregivers working full-time, to use additional child care arrangements. This could explain why 29% of Denver households have one other primary provider, in addition to the child's preschool program. For those families in Denver attending a program where full-time is not available, if offered, almost half would choose this option.

3. Extended hours beyond the typical workday are not in high demand. Most children in Denver attend preschool five days a week. More than half of all households, however, said their child is "never" in school between the hours of 6 am and 8 am. Three-quarters said their child is "never" at preschool between 4 pm and 7 pm. Nearly half of Denver's children attend school 15 hours a week or less. Meanwhile, 43% attend between 16 and 40 hours a week. Only a small percentage of children (6%) attend preschool more than 40 hours a week. These data are consistent with national figures. The highest U.S. average for the number of hours spent in an arrangement by preschoolers of employed mothers was 34 hours.

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5. Cost is a barrier for many families in securing the preschool of their choice. Roughly one-fourth of the households surveyed with a child in preschool pay no tuition. Another 24% pay \$250 a month or less. Still, nearly 40% said that the cost of preschool prevented them from getting the kind of program they wanted. National data indicate that low-income families were less likely to afford preschool tuition than households not in poverty. Denver households that qualify for government agency programs claim such tuition assistance is essential to their ability to work and have access to a quality preschool program for their child.

Appendix A – Weighting Scheme

The demographic characteristics of the survey sample were compared to the population norm for households within the City and County of Denver who have at least one child enrolled in preschool. Survey responses were weighted so the sample would reflect the larger population of families in Denver with at least one child in preschool. Researchers produced a weighting scheme with gender, age, ethnicity and education. All survey responses were analyzed using the weighted data.

Characteristic	5% Public Use Microdata Equivalency 2000*	Survey sample Unweighted Data	Weighted Data
18 to 34	52%	37%	53%
35+	48%	63%	47%
Female	55%	70%	61%
Male	45%	30%	39%
Female 18 to 34	30%	28%	33%
Female 35+	25%	42%	29%
Male 18 to 34	22%	9%	20%
Male 35+	23%	21%	18%
White	58%	78%	50%
Black/African American	12%	6%	5%
Other	30%	16%	45%
Hispanic	41%	16%	53%
Not Hispanic	59%	84%	47%
High school or less	49%	14%	50%
More than high school	51%	86%	50%
Less than \$25,000	48%	7%	25%
\$25,000 to \$50,000	52%	15%	20%
\$50,001 or more	0%	78%	54%
English	64%	93%	76%
Spanish	30%	6%	23%
Other	6%	1%	1%

*Census 2000, Public Use Microdata Sample, (PUMS), United States, prepared by the U.S. Census Bureau, 2003.

*Households with children age 3 to 5 enrolled in preschool.

Households (unweighted) 8,986 (406)

Preschoolers enrolled (unweighted) 9,454 (426)

Appendix B – Survey Methods

National Research Center, Inc. (NRC) provided assistance for a set of research tasks, including collecting telephone survey data and preparing the data for analysis. NRC used rigorous methodology for data collection. Among the protocols employed, each telephone number in the sample was contacted multiple times, increasing the response rate over a single-contact approach and helping to reduce non-response bias in the sample.

The survey data were recorded electronically using a Computer-Assisted Telephone Interviewing (CATI) system. CATI is a software program that automatically dials phone numbers, logs dispositions and records responses to completed interviews. Phone calls were made to Denver households from February 21 to March 17, 2008. The length of the survey averaged about 15 minutes. A majority of the interviews was completed during the evening hours, although calls were made on the weekend and during weekdays also.

A summary was provided of dispositions for every call attempt. Typical call disposition categories included: refusal, busy, computer tone, no answer, language barrier (other than Spanish), disconnected, business/government, answering machine, mid interview terminate, scheduled callback, and completed.

Disposition of all Numbers Called	
Complete	700
Partial	34
Refusal	2,669
Respondent never available	1,262
Language problem	772
Always busy	23
No answer	3,679
Answering machine	1,444
Call blocked	1,038
Fax/data line	398
Non-working number	449
Disconnected number	4,654
Business, government office, other organizations	195
Cell phone/pager	12
No eligible respondent	3,378
Other, not eligible	17
Total phone numbers used	20,724
I = Complete Interviews	700
P = Partial Interviews	34
R = Refusal and break off	2,669
NC = Non Contact	1,262
O = Other	772
e ⁶ = estimated proportion of cases of unknown eligibility that are eligible	37%
UH = Unknown household	6,184
UO = Unknown other	0
Response Rate⁷	9%

All responses were held in the strictest confidence. Respondent names were never associated with the answers provided on the survey. Only first names were captured for possible

⁶Estimate of e is based on proportion of eligible households among all numbers for which a definitive determination of status was obtained (a very conservative estimate).

⁷The response rate was calculated as $I / ((I+P) + (R+NC+O) + e(UH+UO))$.

verification by a supervisor (10% actually being called back). All responses were kept in the dataset by a unique numeric identifier only. Before the data were analyzed, an in-depth cleaning of the data was conducted as part of NRC's standard quality control procedures.

A total of 20,724 phone numbers were dialed during the survey administration. Some of these numbers were considered ineligible for the survey (e.g., respondent did not reside within the city/county limits of Denver; respondent did not have at least one preschool-aged child who was currently enrolled or would be enrolled in the fall of 2008). Of the approximately 17,739 Denver households called, 700 completed interviews, including 28 in Spanish, providing a response rate of 9%. Approximately 15% of households refused the survey.

Appendix C – Understanding the Results

Sample Size and Precision of Estimates

It is customary to describe the precision of estimates made from surveys by a “level of confidence” (or margin of error). The 95 percent confidence level for the survey is generally no greater than plus or minus four percentage points around any given percent reported for the entire sample (700 completed interviews).

The relationship between sample size and precision is interpreted as follows: If 75% of 800 respondents report that having teachers with certification in early childhood education was an “essential” factor in selecting their child’s preschool program, we can be confident that, had we surveyed every household in Denver with a child in preschool, somewhere between 71.5% and 78.5% would have provided this answer. A margin of error of $\pm 5\%$ is felt to be acceptable to many audiences, including the public at large.

Margin of Error (95% Confidence Interval)

Sample Size	Margin of Error
100	10%
400	5%
800	3½%
1,000	3%

Rounding

For some questions, respondents were permitted to provide multiple responses. When the total exceeds 100% in a table for a multiple response question, it is because some respondents are counted in multiple categories. When a table for a question that only permitted a single response does not total to exactly 100%, it is due to the customary practice of percentages being rounded to the nearest whole number.