



**THE SUNSHINE PORTAL**

Florida's Early Childhood Integrated Data System

# The Florida Index of Child Care Access (FLICCA).

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**Brief**

**Early Childhood Policy Research Group (ECPRG)**

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The Sunshine State Early Childhood Information Portal is supported by the Division of Early Learning through the Preschool Development Grant Birth through Five Initiative (PDG B-5) Number 90TP0004-02-00 from the Office of Child Care, Administration for Children and Families, U.S. Department of Health and Human Services.

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## INTRODUCTION

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Access to high-quality child care is of great importance for both children and families. Research has consistently indicated that participation in high-quality early learning and care supports positive social, emotional and academic development,<sup>1</sup> particularly for children from low-income households<sup>2</sup>. Child care also supports parents' professional development and career opportunities,<sup>3</sup> enabling them to better maintain employment.<sup>4</sup> As part of former President Bill Clinton's welfare reforms, the Child Care Development Fund (CCDF) was created in 1998<sup>5</sup> and later reauthorized in 2014 to provide states with federal funds to increase low-income working families' access to child care with financial support through child care subsidies<sup>6</sup>. Since the implementation of CCDF, researchers have consistently documented that families receiving child care subsidies are significantly more likely to work than similar low-income families without subsidies<sup>7</sup> and families with access to child care have maintained employment and seen increases in earnings<sup>8</sup>. These effects have the potential to support young families attempting to achieve economic self-sufficiency<sup>9</sup> as well as positive developmental outcomes for their children.<sup>1</sup>

The Florida Department of Education, Division of Early Learning (DEL) administers the CCDF child care subsidy program, known within Florida as the Florida School Readiness program (SR). In 2018, the DEL contracted the University of Florida Anita Zucker Center for Excellence in Early Childhood Studies' Early Childhood Policy Research Group (ECPRG) to develop and pilot a tool, the Florida Index of Child Care Access (FLICCA), to identify the extent to which children and families participating in the SR program within five Early Learning Coalitions (ELC)<sup>10</sup> have reasonable access to quality child care services<sup>11</sup>. Following the successful pilot, the DEL funded an expanded version to incorporate all ELCs throughout the State of Florida. Through partnership with local leaders among ELCs, the ECPRG solicited feedback from FLICCA 2.0 users and continued to make refinements to the tool to better inform policy decisions aimed at increasing access to quality child care. Ongoing development of the FLICCA tool has been supported by Florida's Preschool Development Grant Birth-to-5. The current version, FLICCA 4.0, is housed on the [Sunshine State Early Childhood Information Portal](#). The visualizations

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<sup>1</sup> NICHD, 2000; NICHD & Duncan, 2003; Crosby et. al., 2005; Gormley & Gayer, 2005; Downer, Rimm-Kaufman, & Pianta, 2007; LoCasale-Crouch, et. al., 2007; Burger, 2010; Reynolds et. al., 2010.

<sup>2</sup> Votruba-Drzal, Coley, Chase-Lansdale, 2004; McCartney et. al., 2007; Burchinal, et. al., 2010.

<sup>3</sup> Davis & Weber 2001; Brooks et. al., 2002; Bambridge et. al., 2003; Tekin, 2005; Grobe et. al., 2008; Ha, 2009; Forry, & Hofferth, 2011.

<sup>4</sup> Baum, 2002.

<sup>5</sup> Child Care and Development Fund (CCDF), 2016.

<sup>6</sup> Child Care and Development Block Grant (CCDBG), 2015.

<sup>7</sup> Brooks et al., 2002; Bambridge et. al., 2003; Tekin, 2005.

<sup>8</sup> Meyers, Heinzte, & Wolf, 2002.

<sup>9</sup> Brooks et. al., 2002.

<sup>10</sup> The thirty Early Learning Coalitions contract with the Florida Division of Early Learning to manage local implementation of the SR program and the Florida Voluntary Pre-Kindergarten Program (VPK).

<sup>11</sup> Knopf, Sherlock & Zhou, 2018.

provided through the FLICCA use administrative data from the DEL to report existing SR-contracted child care providers and SR families using the service. Thus, calculations are derived from the real use of child care by families participating in the SR program. Results are presented monthly at the zip code level. These time and geographic nuances allow policymakers to tailor decisions based upon the unique nature of their local child care markets.

## SUPPLY AND DEMAND MEASUREMENT

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The FLICCA 4.0 reports access to child care through the balance of supply and demand among families participating in the SR program. The adequacy of supply is measured through **infrastructure**,<sup>12</sup> the number of high-quality slots available to SR participants enrolled in child care within a specific zip code. Demand is reported by the number of enrollments in the SR program, further refined by the **selection**<sup>13</sup> measurement, the tendency of families to enroll, or not to enroll, their children in high-quality care. Both variables are reported as a score of a negative value, a positive value or zero and are defined in Table 1: Measurement Guide. While each measure is informative independently, the relationship between these two values best guides policy decision making, discussed in the following section.

Table 1: Measurement Guide

	<b>Infrastructure</b>	<b>Selection</b>
<b>Positive</b>	There are more high-quality slots available than children receiving subsidies.	More families are utilizing high-quality care than not high-quality care.
<b>Zero</b>	There is no infrastructure present and/or the supply of high-quality slots equals the demands of SR children.	There is no population present and/or the utilization of high- and not high-quality care is equal.
<b>Negative</b>	There are more children receiving subsidies than available high-quality slots.	More families are utilizing not high-quality care than high-quality care.

The Classroom Assessment Scoring System (CLASS) is used as a measure of quality. This tool measures the quality of interactions among children and their teachers in early childhood education settings producing ratings on a seven-point

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<sup>12</sup>  $Inf = C_h - E_t$ ; **Infrastructure** = High CLASS Provider Capacity – # Enrolled SR Children

<sup>13</sup>  $Sel = \frac{E_h}{C_h} - \frac{E_l}{C_l}$ ; **Selection** =  $\frac{\# \text{ SR Children in High CLASS Providers}}{\# \text{ Slots at High CLASS Providers}} - \frac{\# \text{ SR Children in Not-High CLASS Providers}}{\# \text{ Slots at Not-High CLASS Providers}}$

scale<sup>14</sup>. The CLASS is administered to all SR-contracted child care providers, with the exception of some who are exempt, which allows for uniform quality comparisons across the state. While the DEL has established a minimum CLASS score threshold of 3.5 for provider eligibility to participate in the SR program<sup>15</sup>, higher levels of performance are necessary to support improved outcomes for children. To aid in the utility of FLICCA, users can establish the CLASS Quality Threshold that will be used to designate providers as having a high CLASS score for purposes of selection and infrastructure analyses. If a user selects a CLASS score of 5.0, for example, all providers with a score of 5.0 or higher will be considered as having a high CLASS score. In time, the team plans to use additional indicators to assess quality such as Gold Seal accreditation and child assessments.

## INTERPRETING THE FLICCA

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The convergence of infrastructure and selection informs local policymakers of areas with reasonable or limited child care access. Each zip code is color coded to illustrate the equilibrium between supply and demand as reported by infrastructure and selection scores. The map is accompanied by *The FLICCA Interpretation Guide*, see **Appendix A**, to assist decision-makers as they understand and improve the extent to which children and families have reasonable access to high-quality child care.

The FLICCA is intended to be used to understand and improve access for families participating in the SR program with limited ability to be generalized to other populations. The tool uses SR enrollment to measure demand, which does not capture demand from families that are using child care but are not enrolled through the SR program. Infrastructure is calculated using SR providers, not including potentially available child care supply for other populations.

It is also important to keep in mind the current state of the FLICCA measurements while interpreting its results. The FLICCA lists total licensed capacity for each provider as available slots of SR children. Many providers, however, may not fill their entire capacity with SR children and/or their preferred capacity is less than their licensed capacity. Therefore, in areas where infrastructure is reported to be low, for example, the severity of the problem may be far greater than indicated. A similar logic can be applied to locations where demand and infrastructure seem relatively equal. This measure continues to be refined as ECPRG obtains more precise data related to available slots for SR children.

## INTERACTIVE FEATURES

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<sup>14</sup> La Paro, Pianta, & Stuhlman, 2004; Division of Early Learning, 2021a.

<sup>15</sup> Division of Early Learning, 2021b.

The FLICCA's interactive maps can be viewed at the state, Early Learning Coalition and zip code levels. Once zoomed to the Early Learning Coalition of interest, the user can select specific zip codes, providers and quality ratings to view additional relevant information related to enrollment, SR status, utilization rates and provider quality rating. Indicators of access to quality child care service are tracked over time and displayed in an information dashboard to show trends related to availability, accessibility and durability of enrollment in the SR program. Please find the FLICCA [here](#) to utilize its interactive features.

## REFERENCES

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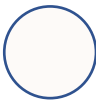

- Bambridge, J., Meyers, M.K., & Walfogel, J. (2003). Child care policy reform and the employment of single mothers. *Social Science Quarterly*, 84(4), 771-791.
- Baum, C. L. (2002). A dynamic analysis of the effect of child care costs on the work decisions of low-income mothers with infants. *Demography*, 39 (1), 139-164.
- Brooks, F., Reisler, E., Hamilton, C., & Nackerud, L. (2002). Impacts of child care subsidies on family and child well-being. *Early Childhood Research Quarterly* 17, 498-511.
- Burchinal, M., Vandergrift, N., Pianta, R., & Mashburn, A. (2010). Threshold analysis of association between child care quality and child outcomes for low-income children in pre-kindergarten programs. *Early Childhood Research Quarterly*, 25, 166-176. doi: 10.1016/j.ecresq.2009.10.004
- Burger, K. (2010). How does early childhood care and education affect cognitive development? An international review of the effects of early intervention for children from different social backgrounds. *Early Childhood Research Quarterly*, 25, 140-165.
- Child Care and Development Block Grant Act of 1990, 42 U.S.C. § 9857(b) (2015). <https://www.govinfo.gov/content/pkg/USCODE-2015-title42/html/USCODE-2015-title42-chap105-subchapII-B.htm>
- Child Care and Development Fund (CCDF) Program, 81 Fed. Reg. 67,438, 67,442 (2016) (codified at 45 C.F.R. pt. 98). <https://www.govinfo.gov/app/details/FR-2016-09-30/2016-22986>
- Crosby, D. A., Gennetian, L. A., & Huston, A. C. (2005). Child care assistance policies can affect the use of center-based care for children in low-income families. *Journal of Applied Developmental Science*, 9(2), 86-106.
- Davis, E.E., & Weber, R.B. (2001). The dynamics of child care subsidy use by rural families in Oregon. *American Journal of Agricultural Economics*, 83(5), 1293-1301.
- Division of Early Learning. (2021a). Evaluating child care programs. Evaluating Child Care Programs. Retrieved November 4, 2021, from [http://www.floridaearlylearning.com/Content/Uploads/floridaearlylearning.com/images/CLASS%20one-pager%20-parents%20FINAL\\_ADA\\_BS.pdf](http://www.floridaearlylearning.com/Content/Uploads/floridaearlylearning.com/images/CLASS%20one-pager%20-parents%20FINAL_ADA_BS.pdf)
- Division of Early Learning. (2021b). School Readiness Program Assessment. Retrieved October 28, 2021, from <http://www.floridaearlylearning.com/statewide-initiatives/school-readiness-program-assessment>.

- Downer, J. T., Rimm-Kaufman, S. E., & Pianta, R. C. (2007). How do classroom conditions and children's risk for school problems contribute to children's behavioral engagement in learning? *School Psychology Review, 36*, 413-432.
- Forry, N. D., & Hofferth, S. (2011). Maintaining work: The influence of child care subsidies on child care related work disruptions. *Journal of Family Issues, 32*, 346-368.
- Gormley, W., & Gayer, T. (2005). Promoting school readiness in Oklahoma: An evaluation of Tulsa's pre-K program, *Journal of Human Resources, 40*, 533-558.
- Grobe, D., Weber, R. B., & Davis, E. E. (2008). Why do they leave? Child care subsidy use in Oregon. *Journal of Family and Economic Issues, 29*, 110-127.
- Ha, Y. (2009). Stability of child-care subsidy use and earnings of low-income families. *Social Service Review, 83*, 495-525.
- Knopf, H., Sherlock, P., & Zhou, S. (2018). Pilot study: Application of the Index of Child Care Access among five early learning coalitions in Florida. Gainesville, FL: The University of Florida Childhood Needs Assessment Partnership.
- La Paro, K. M., Pianta, R. C., & Stuhlman, M. (2004). The classroom assessment scoring system: Findings from the prekindergarten year. *The Elementary School Journal, 104*(5), 409-426.
- LoCasale-Crouch, J., Konold, T., Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., Barbain, O. (2007). Observed classroom quality profiles in state-funded pre-kindergarten programs and associations with teacher, program, and classroom characteristics. *Early Childhood Research Quarterly, 22*, 3-17.
- McCartney, K., Dearing, E., Taylor, B.A. & Bub, K.L. (2007). Quality child care supports the achievement of low-income children: direct and indirect pathways through caregiving and the home. *Journal of Applied Developmental Psychology, 28*(5-6), 411-426.
- Meyers, M.K., Heintze, T. & Wolf, D.A. Child care subsidies and the employment of welfare recipients. *Demography 39*, 165-179 (2002).  
<https://doi.org/10.1353/dem.2002.0008>
- NICHD Early Child Care Research Network. (2000). The relation of child care to cognitive and language development. *Child Development, 71*, 960-980.
- NICHD Early Child Care Research Network & Duncan, G. Y. (2003). Modeling the impacts of child care quality on children's preschool cognitive development. *Child Development, 74*, 1454-1475.



- Reynolds, A. J., Magnuson, K. & Ou, S. (2010). Preschool-to-third grade programs and practices: A review of research. *Children and Youth Services Review*, 32(8), 1121-1131.
- Tekin, E. (2005). Child care subsidy receipt, employment, and child care choices of single mothers. *Economics Letters*, 89(1), 1-6.
- Votruba-Drzal, E., Coley, R.L. & Chase-Lansdale, L. (2004). Child care and low-income children's development: direct and moderated effects. *Child Development*, 75(1), 296-312.

## APPENDIX A

Zip Code Color <sup>1</sup>	Infrastructure <sup>2</sup> (Numeric Value)	Selection <sup>3</sup> (Numeric Value)	Interpretation
	Positive	Positive	In this scenario both the selection and infrastructure scores are positive. This means that when considering available care to SR families, a greater proportion of families are enrolling in care with a high CLASS score. Additionally, there are more high CLASS score child care slots than there are children using subsidies in this area. Since both scores are positive, administrators and researchers should investigate these areas to better understand how to implement interventions in the other three types of areas.
	Negative	Negative	In this scenario both the selection and infrastructure scores are negative. This means that when considering available care to SR families, a greater proportion of families are enrolling in low/no CLASS score care. This also shows that there are more children receiving subsidies than there are high CLASS score child care slots. The negative selection score indicates a need for administrators and researchers to investigate why parents are not enrolling the high CLASS score providers. Additionally, there is a need for more high CLASS score slots to make sure that there are enough high CLASS score slots to accommodate all children using subsidies in the area.
	Negative	Positive	In this scenario the infrastructure score is negative and the selection score is positive. This means that when considering available care to SR families, a greater proportion of families are choosing to use high CLASS score care. This also shows that there are more children receiving subsidies than there are high CLASS score slots. Given that more families are enrolling their children in high CLASS score care despite the shortage of high CLASS score infrastructure, the FLICCA indicates a need for an increase in high CLASS score slots to make sure that there are enough high CLASS score slots to accommodate all children using subsidies in the area.
	Positive	Negative	In this scenario the infrastructure score is positive and the selection score is negative. This means that when considering available care to SR families, a greater proportion of families are enrolling in low/no CLASS score care. However, there are more high CLASS score child care slots than there are children receiving subsidies. Given the low selection by families despite there being more high CLASS score slots than children receiving subsidies, The FLICCA indicates a need for administrators and researchers to investigate why families are not enrolling in high CLASS score providers and develop interventions to improve family selection (e.g., a family awareness campaign).
	Zero	Zero	There are no providers present in this area and/or this is a natural area with no population.

<sup>1</sup>Color intensity reflects severity of infrastructure and selection scores.

<sup>2</sup>Infrastructure is the amount of high CLASS score care available; Measured as a positive numeric value, negative numeric value, or zero.

<sup>3</sup>Selection is the rate at which families enroll in high CLASS score care; Measured as a positive numeric value, negative numeric value, or zero.