Michigan’s Licensed Child Care Deserts (Updated June 2025)

# Definition of Licensed Child Care Deserts

This map illustrates the relationship between Michigan’s licensed child care supply and estimated child care demand, highlighting areas considered licensed **child care deserts**: communities where there are not enough licensed child care slots available to serve the population of children. Using the methodology developed by the Center for American Progress and Malik et al. (2018), an area is classified as a child care desert if it meets two criteria: (a) it has at least 50 children residing within the zip code, and (b) the ratio of children to licensed child care slots exceeds 3 to 1 (that is, more than three children competing for one licensed slot). Also, areas with no licensed child care providers are classified as child care deserts.

# Estimation of Licensed Child Care Deserts

Child population in the area includes **overall** (ages 0-13 years), **infants and toddlers** (ages 0-2 years), **preschoolers** (ages 3-5 years), and **school-age children** (ages 6-13 years).

Child population is estimated based on the [**American Community Survey**](https://doi.org/10.18128/D050.V19.0) (Manson et al., 2023). The population includes all children aged 0–2, 3, 4–5, 6–8, 9–11, and two-thirds of those aged 12–14.

Because data on actual enrollment is unavailable, licensed child care slots are estimated using providers’ licensed capacity, proportionally distributed across the age range they serve. For example, if a provider is licensed to care for six children across a six-year span (ages 0-5), it is assumed that the capacity is evenly allocated—approximately one child per age group (e.g., one each for ages 0, 1, 2, etc.).

Data on licensed child care providers are updated daily through the [**Great Start to Quality database**](https://greatstarttoquality.org), which integrates licensing information from [**Michigan’s Department of Licensing and Regulatory Affairs**](https://www.michigan.gov/mileap/early-childhood-education/cclb).

Licensed Child Care Desert Ratio = $\frac{Child Population in the Area}{Licensed Child Care Slots}$

# Definition of Economic Development Organizations

Michigan’s [**economic development organizations**](https://www.michiganbusiness.org/4adf07/globalassets/documents/reports/maps/edc-map.pdf) are coalitions representing each of the state’s ten regions, which aim to support regional economic development. Filtering the map or chart by economic development organizations demonstrates regional differences in child care access.

# Licensed Child Care Deserts by Child Opportunity Index Scores

To show how child care accessibility interacts with community resources, the map breaks down the prevalence of child care deserts by each zip code’s Child Opportunity Index score. [**The Child Opportunity Index**](https://www.diversitydatakids.org/child-opportunity-index?_ga=2.124683146.1664613981.1746188155-72067457.1716986317) is an estimate of the local resources available for positive child development in an area, ranging from "very low" to "very high" (diversitydatakids.org, 2024). The Child Opportunity Index was created by diversitydatakids.org and is housed at Boston University’s School of Social Work and the Institute for Equity and Child Opportunity and Healthy Development.

# Licensed Child Care Deserts by Provider Types

To assess how child care accessibility may differ by provider type, data were grouped according to providers’ licensing description:

* **Centers** (which operate outside of residential homes)
* **Family homes** (which operate within residential homes and may serve up to 6 children)
* **Group homes** (which operate within residential homes and may serve up to 12 children)

# Licensed Child Care Deserts by Geographic Types

To assess how families in different geographic areas may experience varying levels of licensed child care access, the data were analyzed by geographic types—urban, suburban, and rural/town—based on classifications from the [**National Center for Education Statistics**](https://nces.ed.gov/programs/edge/geographic/schoollocations). Due to a small sample size for “town” areas, rural and town categories were combined.

# Assumptions

Due to data availability, the following assumptions were made to provide estimations:

* It is assumed that all families with children counted in the American Community Survey are seeking licensed child care and such search only within their zip code or county. As a result, this approach likely overstates the actual demand.
* For licensed providers serving multiple age groups, it is assumed that they operate at full capacity and that available slots are evenly distributed across all age groups. This may result in an overestimation of availability, especially for younger children who typically require more resources and space.
* All licensed providers are assumed to operate year-round, without accounting for part-time schedules or temporary closures, which leads to an overestimation of overall licensed child care availability.

# Limitations

Because of limited data and necessary assumptions, the numbers are estimates—not exact counts—which leads to several limitations:

* Only providers licensed to serve children ages 0 to 13 are included in the current work. Unlicensed, license-exempt, and informal providers—which also contribute to the child care ecosystem—are excluded due to data unavailability.
* The dual assumptions of universal demand and providers operating at full capacity may have led to an overestimation of both child care demand and supply.
* Given that the methodology relies on available licensing data and American Community Survey, estimates may not fully capture local nuances—such as temporary closures, changes in provider schedules, uneven distribution of slots across age groups, or undercounted populations.
* Because the most recent data from [**Child Opportunity Index**](https://www.diversitydatakids.org/child-opportunity-index?_ga=2.124683146.1664613981.1746188155-72067457.1716986317) and [**National Center for Education Statistics**](https://nces.ed.gov/programs/edge/geographic/schoollocations) are only available for 2021, current child care providers are mapped to 2021 Zip Code Tabulation Areas (ZCTA) and county boundaries. This limits the ability to capture more current community conditions and opportunities.

# References

diversitydatakids.org. (2024). *Child Opportunity Index 3.0 Database, 2021 Zip Codes* [Dataset]. Boston University’s School of Social Work and the Institute for Equity and Child Opportunity and Healthy Development. <https://www.diversitydatakids.org/child-opportunity-index>

Malik, R., Hamm, K., Adamu, M., & Morrissey, T. (2018, December 6). *America’s child care deserts in 2018*. Center for American Progress. <https://www.americanprogress.org/article/americas-child-care-deserts-2018/>

Manson, S., Schroeder, J., Van Riper, D., Knowles, K., Kugler, T., Roberts, F., & Ruggles, S. (2024). *IPUMS National Historical Geographic Information System: Version 19.0. 2021 ZCTA and County GIS Shapefiles* [Dataset]. IPUMS. <https://doi.org/10.18128/D050.V19.0>

Manson, S., Schroeder, J., Van Riper, D., Knowles, K., Kugler, T., Roberts, F., & Ruggles, S. (2023). IPUMS National Historical Geographic Information System: Version 19.0. American Community Survey 5-Year Data (2019-2023) [Dataset]. IPUMS. <https://doi.org/10.18128/D050.V19.0>

Michigan Department of Lifelong Education, Advancement, and Potential. (n.d.). *Child Care Licensing Bureau*. State of Michigan. <https://www.michigan.gov/mileap/early-childhood-education/cclb>

Michigan Department of Transportation. (2021). *MDOT RH 2021* [Dataset]. ArcGIS Open Data Portal. <https://gis-mdot.opendata.arcgis.com/datasets/mdot-rh-2021>

National Center for Education Statistics. (2021). *Education Demographics and Geographic Estimates: ZCTA locale assignments* [Dataset]. U.S. Department of Education. <https://nces.ed.gov/programs/edge/Geographic/ZCTAAssignments>

OpenAI[[1]](#footnote-2). (2025). *ChatGPT* (May 2025 version) [Large language model]. <https://chat.openai.com/>

# Recommended Citation

Community Evaluation Programs. (n.d.). *Michigan’s Licensed* *Child Care Deserts* [Map]. Michigan State University. <https://cep.msu.edu/projects/child-care-mapping-project/maps-and-charts/child-care-desert-map>

1. The technical report and map were created using assistance from ChatGPT (OpenAI, 2025) and reviewed and approved by the map’s authors. [↑](#footnote-ref-2)