



A novel option for childcare improvements: federal climate funding

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December 2024

policymattersohio.org



For decades, early childhood educators in Ohio have seen the childcare crisis growing as their work — like that of many in the care economy — has been devalued. Low wages and lack of public investment are causing the industry to lose thousands of dedicated educators. There are fewer spots available for the littlest Ohioans and, even when spots are available, many families cannot afford them. For childcare to be affordable,¹ an Ohio family with an infant and a toddler would have to make \$250,385 — nearly four times Ohio's median household income of \$65,720.²

As costs like housing, utilities, food, and transportation increase, many childcare providers are experiencing razor-thin margins and even closing their doors. From 2019 to 2023, Ohio lost 997 childcare programs, or 11% of all programs.³ This only exacerbates Ohio parents' difficulty accessing and affording high-quality care for their kids.

There is no quick fix or silver bullet; childcare is complex infrastructure with outcomes affected by a variety of factors. In addition to working closely with childcare providers, policymakers should consider all the relevant data as they work toward a childcare system that cares for Ohio's kids. State funding, housing costs, zoning decisions, inflation, pollution levels, and energy costs all impact early childhood educators and the kids, families, and communities they serve.

This report analyzes a specific subset of the childcare ecosystem (licensed childcare providers in Cuyahoga County) through the lens of a single available data tool (the federal government's Climate and Economic Justice Screening Tool, or CEJST for short). This snapshot maps Cuyahoga County childcare programs over several indicators provided by the data tool to reveal how air quality, asthma rates, poverty levels, and energy burdens, matter when addressing the childcare crisis.

Why CEJST? Federal funding for climate justice

The federal government's [Justice40 Initiative](#) offers an opportunity to reverse the lasting impacts of redlining and environmental racism⁴ faced by many of Ohio's

¹ U.S. Dept. of Health and Human Services [defined childcare as "affordable" if it cost 7% of a family's annual income](#) or less. See the [Child Care and Development Fund Program rules](#) from the Office of Child Care, Administration for Children and Families. Sept. 30, 2016.

² "[Ohio's Childcare Crisis](#)," Policy Matters Ohio. March 28, 2024.

³ "[Child Care Funding Cliff at One Year: Rising Prices, Shrinking Options, and Families Squeezed](#)," The Century Foundation, September 24, 2024.

⁴ Extensive research documents the inextricable link between environmental harms and historical redlining practices. Redlining practices paved the way for decades of overtly racist policymaking, public budgeting, and local planning decisions. Learn more about the history of redlining in the U.S. and explore the redlining maps using the University of Richmond's data tool, [Mapping Inequality: Redlining in New Deal America](#).



children – and by their childcare providers. Under the Justice40 Initiative, “disadvantaged communities that are marginalized by underinvestment and overburdened by pollution” should receive 40% of the benefits from Justice40-covered programs under the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA)⁵ – two pieces of federal legislation that collectively represent a historic federal investment in climate change mitigation and community resilience.

To advance Justice40 goals, the Climate and Economic Justice Screening Tool (CEJST)⁶ identifies communities that are disadvantaged based on eight factors: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development.⁷ Federal agencies, state and local governments, and community-based organizations can use the CEJST tool to identify target geographies for clean energy and infrastructure investments – referred to in this report as Justice40 communities – driven by the BIL and IRA. Ohio will see billions in federal dollars directed to these communities and would be negligent to not consider how these federal investments can positively impact a childcare sector in crisis.

Different types of childcare providers
The state categorizes childcare providers by their location, the number of children they care for, and whether they have employees:

Childcare centers provide care for more than seven children in a facility that is not a private home. They have at least one employee.

In-home care providers are either Type A or Type B. For both types, children under 6 who are family members of providers must be included in count size.

- Type A providers care for up to 12 children at one time and must maintain a ratio of at least one staff member for every six children, with each staff member caring for no more than three children under age 2.
- Type B providers care for up to six children at one time with no more than three under age 2. Type B providers do not have employees.

⁵ [Justice 40: A Whole-of-Government Initiative](#). The White House.

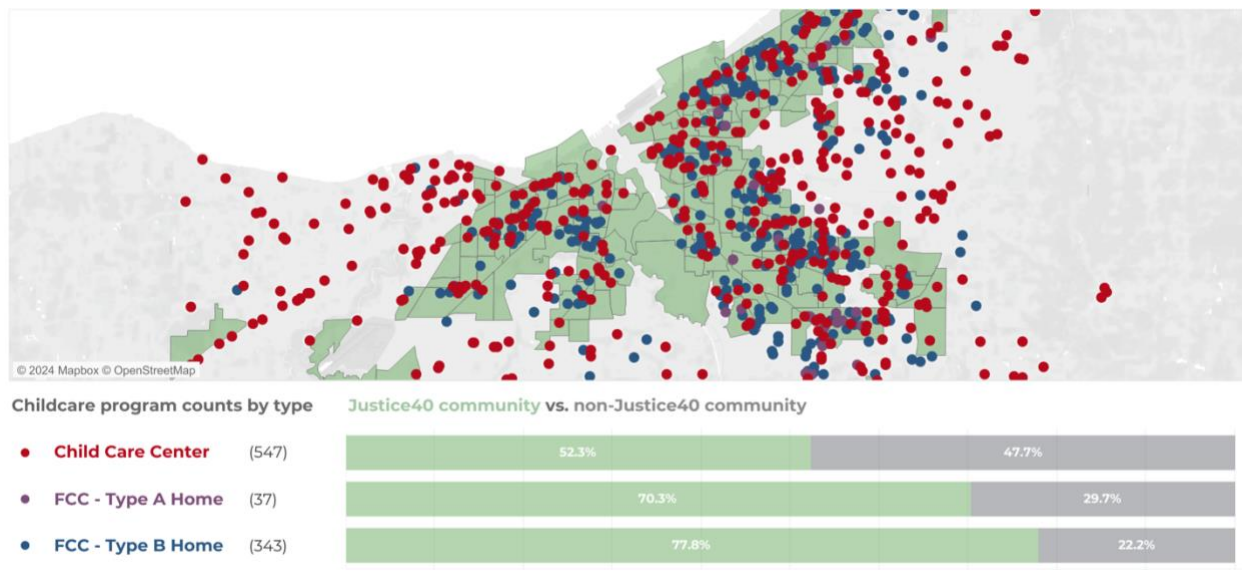
⁶ [Climate and Economic Justice Screening Tool](#), Council on Environmental Quality.

⁷ To be designated as a Justice40 community, a census tract must meet or exceed the threshold for one or more burden category (e.g., climate change, energy/pollution, health) in addition to a corresponding socioeconomic condition. To illustrate, a Justice40 tract would meet the criteria for the energy burden category if it were at the 90th percentile for energy costs or pollution levels, and at the 65th percentile for low income. The CEJST determines low income by the percentage of a tract’s population at or below 200% of the FPL. Learn more about the Climate and Economic Justice Screening Tool’s methodology here: <https://screeningtool.geoplatform.gov/en/methodology>

Cuyahoga County childcare providers⁸ are more likely than providers statewide to be located in Justice40 communities: 52% of Cuyahoga County childcare centers, 70% of Type A programs, and 78% of Type B programs are in communities that meet the CEJST’s definition of “disadvantaged.” [See sidebar for definitions of provider types.]

Figure 1 shows differences in Justice40 community status for all childcare centers and in-home providers in Cuyahoga County. [View the interactive map here.](#)

Figure 1. Cuyahoga County childcare providers in Justice40 communities



CEJST and air quality

Poor air quality – both indoor and outdoor – poses significant threats to children’s health, especially as a driver of the most common chronic disease among Ohio’s children: asthma.⁹ During childhood in particular, higher exposure to pollution – which is more prevalent in urbanized, redlined neighborhoods – can increase the risk of asthma development into adulthood.¹⁰

CEJST can be used to map levels of particulate matter pollution, a common indicator of air quality and one of the most harmful forms of pollution for human health, linked to an array of respiratory conditions including asthma. In urbanized areas, emissions from gas-powered vehicles and fossil-fuel burning power generation

⁸ Provider types are defined by [Ohio Jobs and Family Services](#).

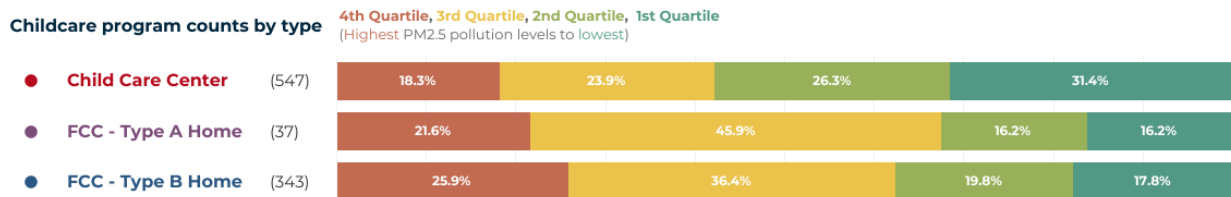
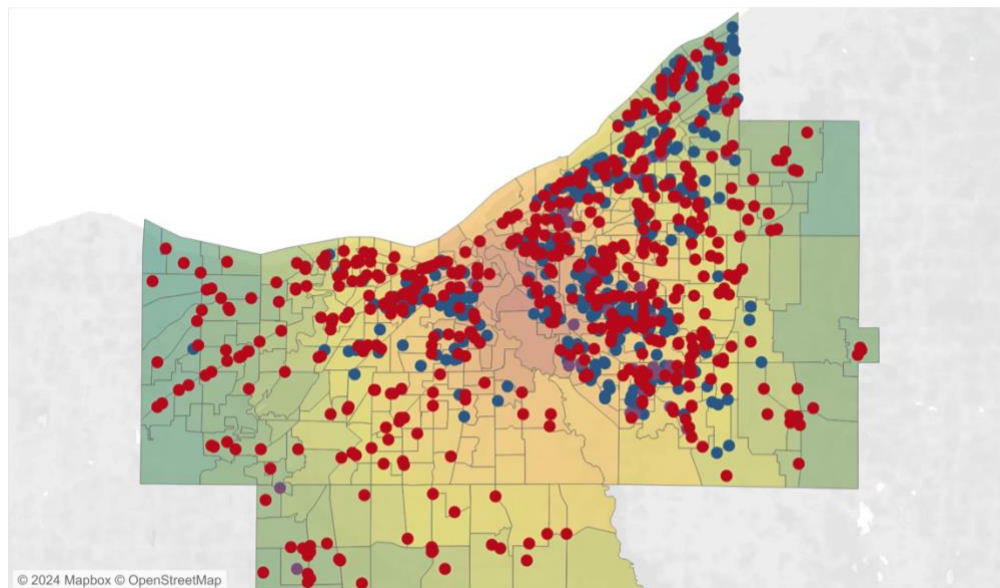
⁹ “[Burden of Asthma in Ohio](#),” Asthma Program, Ohio Department of Health, 2019.

¹⁰ [Impact of Air Pollution on Asthma Outcomes](#), Angelica I. Tiotiu et al. *International Journal of Environment Research and Public Health*. August 27, 2020.

stations are a major source of particulate matter. During childhood in particular, higher exposure to traffic pollution – which is more prevalent in urbanized, redlined neighborhoods – can increase the risk of asthma development into adulthood.¹¹ Particulate matter and other forms of pollution cause airway inflammation, exacerbating asthma symptoms and inequitable health outcomes for communities consistently exposed to low air quality.

The map below shows childcare program locations, including childcare centers, Type A home-based providers, and Type B home-based providers, layered over fine particulate matter (PM_{2.5})¹² pollution levels drawn from the CEJST. The corresponding chart shows the distribution of childcare programs by program type located in tracts across the lowest to highest quartiles of PM_{2.5} pollution exposure.

Figure 2. Cuyahoga county childcare programs and outdoor air quality



¹¹ [Impact of Air Pollution on Asthma Outcomes](#), Angelica I. Tiotiu et al. *International Journal of Environment Research and Public Health*. August 27, 2020.

¹² Fine particulate matter, or PM_{2.5}, is defined as inhalable particles with diameters around 2.5 micrometers or smaller. According to the [EPA’s explainer on particulate matter](#), PM_{2.5} has the greatest health risks, compared to other forms of pollution.



Policies and investments to lower pollution levels will especially benefit kids who attend childcare programs in Cuyahoga County, where 43.7% of programs are located in census tracts with pollution levels that are higher than the statewide median.

The state should prioritize investments in public transportation infrastructure to decarbonize the transportation sector – one of Ohio’s most emissive sectors – and improve air quality in heavily-traveled areas. In addition to route expansions and fleet electrification, state investments in transit could enhance bus stop shelters and transit facilities, further incentivizing transit ridership. For example, many bus stops are inaccessible or inconvenient for parents due to a lack of covered shelters, seating, or space for a stroller.

Expanding access to sustainable public transportation options would reduce emissions from passenger vehicles, which in turn mitigates asthma risks exacerbated by gas-powered vehicles. Transit preferences hinge on reliability, efficiency, and affordability. Increased state funding for public transit could address these concerns, while reducing local transit providers’ reliance on local funding sources and enhancing riders’ experiences – both in transit and during wait times. Well-funded transit systems can also improve Ohio families’ access to childcare and well-paying jobs while generating better health and environmental outcomes for all Ohioans.

CEJST and asthma

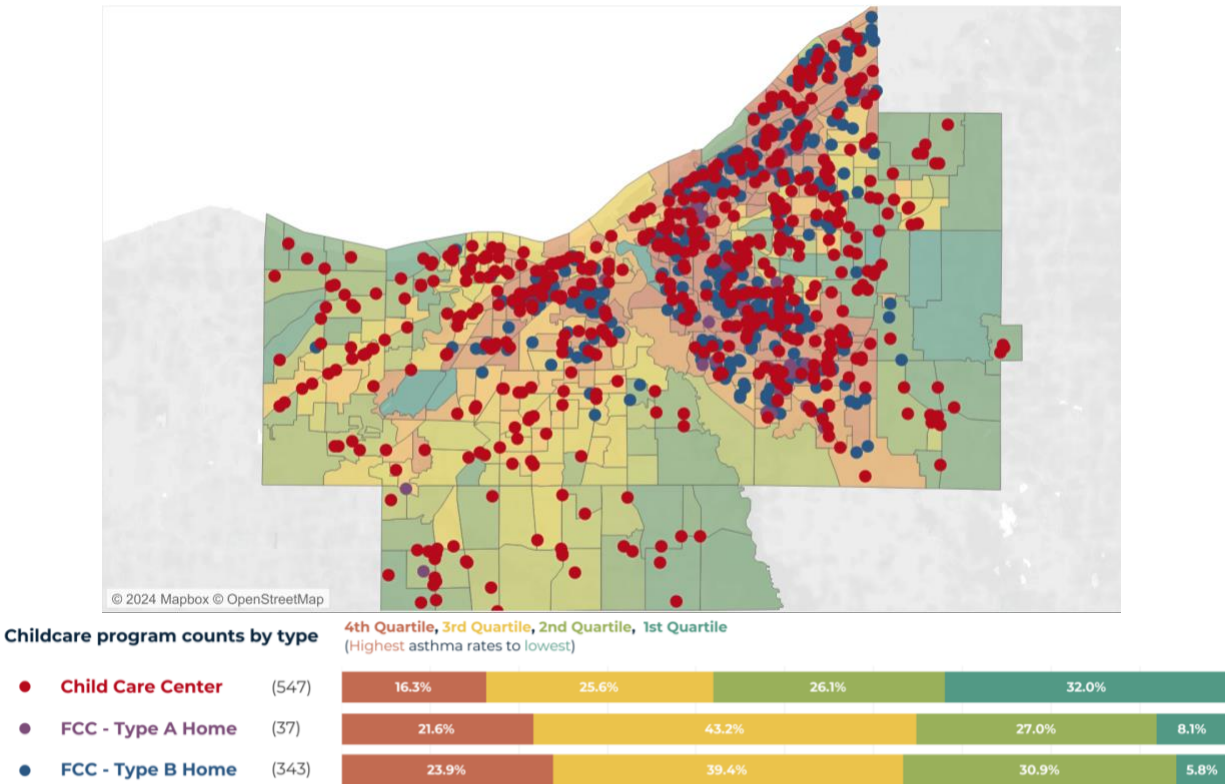
In Cuyahoga County, 64% of childcare centers, 86.5% of Type A programs and 93% of Type B programs are in census tracts in the highest quartile of adult asthma rates. Though data on childhood asthma are unavailable at the census-tract level, Black and low-income communities tend to have higher rates of adult asthma in Cuyahoga County, corresponding with a county-level analysis on both adult and childhood asthma prevalence.

According to the Ohio Department of Health, Black children in Ohio are significantly more likely to be hospitalized or visit the emergency department for severe asthma symptoms compared to the statewide rate for white children. In Cuyahoga County, disparities in asthma-related hospitalizations and emergency room visits are even more stark. While asthma rates for white children in Cuyahoga County are consistent with statewide rates, Black children are far more likely to experience severe asthma

symptoms – in fact, rates of asthma-related hospitalizations and emergency room visits are about six times higher than those of white children in Cuyahoga County.¹³

The figure below maps childcare programs over census-tract level asthma rates, showing many home-based providers are concentrated in communities with greater respiratory health risks.

Figure 3. Cuyahoga county childcare programs and asthma rates



Governor DeWine has established the Outcomes Acceleration for Kids Learning Network (OAK) to raise kids’ school attendance rates by shifting focus to asthma prevention and sickle-cell care. The OAK program will involve coordination across healthcare providers, Medicaid-managed care plans, and school-based health services while “shifting its focus to positive health outcomes instead of the business of care”¹⁴ and increasing the cadence of follow-up interventions after an emergency room visit. The governor should expand this initiative to include childcare programs, because mitigating asthma risks is especially important for young children.

¹³ “[Cuyahoga County The Current Status of Asthma Burden](#),” Ohio Department of Health. 2023.

¹⁴ “[Governor DeWine’s State of the State 2024: Focusing on Ohio’s children](#),” Tara Britton, the Center for Community Solutions, April 2024.



Childcare providers can educate parents about ways to reduce the risk of asthma at home and connect them to other supportive resources – and the state should increase reimbursement rates to ensure childcare providers can build the financial and staffing capacity to serve this critical role.

To address the root causes of childhood asthma, policymakers must understand this link between pollution levels and asthma rates and consider ways to reduce climate pollution and improve indoor air quality. A holistic approach that considers disparities in Ohioans' economic and environmental burdens is critical to closing health and wealth gaps for Ohio's kids.

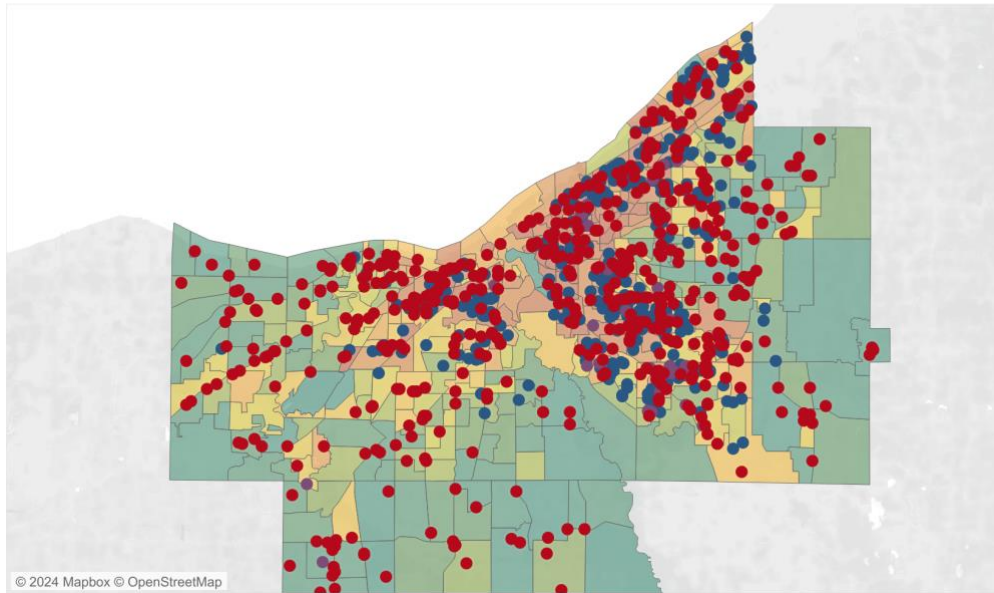
CEJST and socioeconomic indicators

Justice40 communities are home to a larger share of families facing economic insecurity. The typical Ohioan is in the 47th percentile for the poverty rate in their respective census tract, compared to the 52nd percentile for the typical Cuyahoga County resident.¹⁵ When comparing poverty rates in Justice40 communities to those in non-Justice40 tracts, the difference is stark: On average, Justice40 communities in Cuyahoga County are at the 85th percentile for the share of the population living below 100% of the federal poverty line (FPL), while non-Justice40 tracts are at the 31st percentile. Nearly three quarters (73.1%) of Cuyahoga County childcare programs are in census tracts with poverty rates higher than the statewide median.

The next figure maps Cuyahoga County's childcare programs over a heatmap illustrating tract-level percentiles for the share of the population living below 100% of the federal poverty line (FPL).

¹⁵ The CEJST dataset provides census tract-level percentiles for each indicator included in its methodology. To determine the average FPL percentile at the state and county level, by Justice40 and non-Justice40 designation, census tracts' percentiles were weighted for population and averaged across geographic and community contexts.

Figure 4. Cuyahoga county childcare programs and poverty rates



Childcare program counts by type	4th Quartile, 3rd Quartile, 2nd Quartile, 1st Quartile (Highest share of the population living below 100% FPL to lowest)			
	4th Quartile	3rd Quartile	2nd Quartile	1st Quartile
● Child Care Center (547)	22.71%	19.41%	24.36%	33.52%
● FCC - Type A Home (37)	21.62%	35.14%	27.03%	16.22%
● FCC - Type B Home (343)	28.28%	32.94%	25.95%	12.83%

Legislators can and should use the upcoming state budget¹⁶ to expand Ohio’s Publicly Funded Child Care system and raise wages for early childhood educators.¹⁷ By raising Ohio’s lowest-in-the-nation initial eligibility threshold and increasing reimbursement rates, they can directly impact the tight budgets many families face and the razor thin margins that continue to push childcare programs to close.

A better understanding of financial burdens endured by our childcare providers can equip policymakers with deeper insight into the interplay between climate and economic conditions. In turn, decision makers can develop creative policy interventions that center the economic wellbeing of Ohio’s working families, while reversing environmental injustices that continue to drive economic disparities across the state.

¹⁶ “[How the budget can bring out the best in Ohio](#),” Policy Matters Ohio, August 1, 2024.

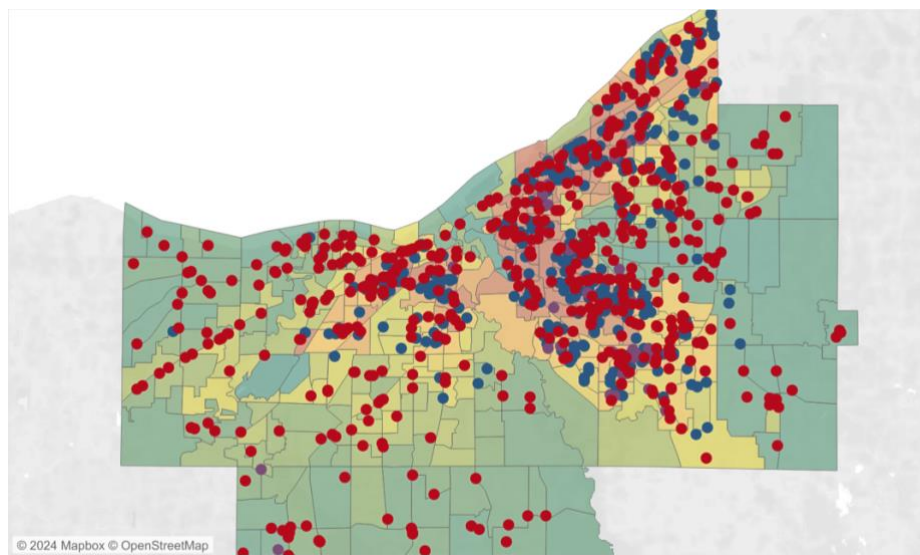
¹⁷ “[A New Way Forward](#),” Policy Matters Ohio, May 1, 2023. See specifically the “Fund quality child care for families and ensure livable wages for care workers” section.

CEJST and energy burdens

Higher poverty rates in childcare providers’ communities directly correspond with outsized residential energy burdens: The percentage of household income spent on energy costs, like electricity and heating fuel. CEJST data show that Cuyahoga County’s childcare programs are more likely to be sited in neighborhoods with high¹⁸ energy burdens. Large majorities of home-based childcare – 84% of Type A programs and 88% of Type B programs – are sited in census tracts with energy burdens above the state median, as are 59% of center-based programs. Increasing energy costs can be devastating to childcare programs already struggling to make ends meet. Rising energy burdens make it difficult for childcare providers to keep the lights on, keep food fresh, and maintain safe indoor temperatures and air quality.

The figure below shows Cuyahoga County childcare programs mapped over a heat map of tracts’ energy burden percentile.

Figure 5. Cuyahoga county childcare programs and residential energy burdens



Childcare program counts by type	4th Quartile, 3rd Quartile, 2nd Quartile, 1st Quartile (Highest energy burdens to lowest)
● Child Care Center (547)	21.4% 21.0% 23.4% 34.2%
● FCC - Type A Home (37)	21.6% 51.4% 13.5% 13.5%
● FCC - Type B Home (343)	36.7% 32.9% 23.9% 6.4%

¹⁸ An energy burden greater than 6% of a family’s income is considered high. Read the American Council for an Energy-Efficient Economy’s report, [Understanding Energy Affordability](#), for further information on energy affordability issues.



Hundreds of Cuyahoga County’s childcare programs are located in providers’ homes and can benefit from efforts to ease residential energy burdens. The federal government funds programs for home weatherization and energy efficiency improvements, and utility bill assistance like the Home Energy Assistance Program (HEAP) and the Percentage of Income Payment Plan (PIPP). The BIL authorized supplemental funding for the federal Weatherization Assistance Program (WAP) and the Low Income Home Energy Assistance Program (LIHEAP, known as HEAP in Ohio) – delivering an additional \$4.5 million in HEAP funding to Ohio for FY 2024.¹⁹ The IRA also allocated \$249 million to Ohio for designing and administering a home energy efficiency rebate program for low- and moderate- income households, reducing residential energy consumption and lowering utility bill expenses.

With greater federal support for these programs, Ohio administrators have more capacity to improve service coordination and delivery, reaching more Ohioans with undue energy burdens. State and local agencies can expand the use of these public energy programs, including outreach to and engagement of in-home childcare providers. As trusted community members, childcare providers are also ideal partners for program outreach aimed at connecting more families with these opportunities — if policymakers make this possible through real investments in the sector.

Ohio legislators should also pass legislation to enable community solar in Ohio, like House Bill 197. Community solar opens opportunities to benefit from clean energy, like solar power, generated off site, allowing program participants to choose clean energy through a voluntary subscription. It can accelerate the adoption of clean energy sources, especially for renters, multi-family households, those with shaded or deficient roofs, or families who can’t finance the upfront costs of installing a rooftop solar array on their homes. Community solar can reduce Ohio’s reliance on fossil fuel generation sources like natural gas, which represents the largest share of electricity generated and consumed in Ohio.²⁰ Enabling community solar participation in Ohio would begin to alleviate energy burdens and energy insecurity for families and childcare providers, generating better economic security and health outcomes for Ohio’s children.

Luckily, there are a range of state and local policy tools available to cut residential energy costs while improving air quality and mitigating environmental harms. Though community solar is broadly unavailable to most Ohioans who are subject to

¹⁹ [Ohio LIHEAP State Snapshot](#), U.S. Department of Health and Human Services, LIHEAP Clearinghouse, June 2024.

²⁰ [State Profile for Ohio](#), U.S. Energy Information Administration.



the whims of investor-owned utilities that dominate Ohio’s electric distribution market, advancing municipally owned utilities can support the deployment of community solar programs. Moreover, localities can expand the impact of federal infrastructure and clean energy spending by complementing investments flowing down to local communities with additional funding streams.

Policy investments and opportunities informed by CEJST data

Complex issues warrant creative, cross-cutting policy solutions. Using just one data tool to look at one county’s childcare provider distribution reveals a wealth of information and proactive policy approaches. CEJST can be used to inform many other policy areas outside of this snapshot. There are many other tools at policymakers’ disposal to craft well-informed policy and guide state investments.

For example, a local government’s clean energy project can serve several purposes beyond decarbonizing our energy system, like reducing household energy costs and creating pathways to good, family-sustaining union jobs. Local decision makers can better understand the implications of rising household costs using tools like the [Bureau of Labor Statistics’ CPI Inflation Calculator](#) and the [Economic Policy Institute’s Family Budget Calculator](#), which in turn necessitates strategies to promote worker power through union organizing and collective bargaining.²¹ Understanding how union membership can reduce inequalities between workers and their employers should motivate local governments to contract with union employers on a clean energy project, not only to support the energy transition, but to empower working Ohioans to participate in an *equitable* transition.

State and local lawmakers have the power to positively impact the lives of Ohio’s children through informed childcare policy. There are many intersections where programs, local initiatives, and state spending can support the childcare sector – and the policy issues and solutions identified in this analysis only scrape the surface.

Ohio’s early childhood educators understand how a wide variety of variables affect children and their development. They remain curious and continually expand their knowledge. They work hard to support parents and raise healthy kids. We should expect no less of our public servants and elected officials.

²¹ [“6 Reasons Collective Bargaining Matters,”](#) Ali Smith, Policy Matters Ohio, June 2024.



Policy Recommendations

Increase funding for Ohio's Publicly Funded Childcare system and raise wages for early childhood educators.

- Ohio's childcare infrastructure holds our communities together, enabling parents and family members to go to work or maintain other obligations with the confidence that their child is receiving the care and resources they need to grow. Ohio legislators should recognize the important role that childcare providers serve for Ohio's children and families by **expanding Ohio's Publicly Funded Child Care system and raising wages for early childhood educators.**

Engage childcare providers in programs designed to reduce childhood asthma and lower residential energy burdens.

- DeWine can fulfill his promise to address the root causes of asthma – particularly during the earliest stages of childhood – by expanding childcare providers' capacity to educate parents about early interventions to minimize asthma risks for their kids. To unlock this potential, policymakers should **engage childcare program administrators and staff in the design and implementation of programs oriented toward childhood asthma prevention.**
- Policymakers and administrators can also **enhance public assistance program outreach and delivery by including childcare programs in organizational referral networks.**

Childcare providers must build a high level of trust with the parents they serve. Oftentimes, trust drives effective service delivery, fostering formal and informal information-sharing about available programs and how to access them among providers and families. The trust-based nature of providers' relationships with parents has the potential to make a real impact on parents' awareness of and access to resources to improve families' health and economic security – but first, we must **give providers the resources they need to expand their programming to fill this role with greater public childcare funding.**

Inform policy decisions by considering intersections among environmental and economic conditions.

- Understanding how our energy and transportation systems generate worse outcomes for Black, Latine, and low-income communities underscores the



need to **expand access to renewable energy and clean transportation options.**

Legislators should **pass community solar legislation** in Ohio to accelerate clean energy deployment and reduce household energy burdens and **increase state spending on public transit** through Ohio's transportation budget. Investing in Ohio's public transit systems and shifting from our reliance on fossil fuels would improve air quality and reduce economic burdens for Ohio's families, so Ohio's kids can inherit a healthier, more resilient planet.

- The CEJST has a range of applications that can support comprehensive policy decisions to address unique, place-based problems across Ohio's communities. Systemic harms, like disproportionate exposure to pollution or racial wealth gaps, do not operate independently from one another – and they shouldn't be treated as separate issues. Policymakers must **understand wide-ranging intersections among environmental and economic conditions** to develop impactful policies that better serve Ohio's childcare providers, families, and children.