As hubs of innovation, cities are working to advance support for both the human and physical infrastructure of their communities that address the breadth of public policy to help children and families get off to a great start in life. There is a correlation between the physical environment where people live, work, and play and their quality of life. The health and well-being of young children and their families are impacted by the policies and programs implemented in cities across the country.
Perinatal conditions, influenced by environmental conditions, cause 20% of deaths worldwide in children under the age of five.\(^3\) A child’s health and well-being in the first three years of life set the foundation for future learning, behavior, and health. This period is the most sensitive for a child’s developing brain and body.\(^2\)

An estimated more than three percent of all premature births in the United States each year are caused by air pollution – accounting for about 16,000 premature infants annually.\(^4\)

By 2050, a further 24 million children are projected to be undernourished as a result of the climate crisis.\(^5\)

Expectant parents living in geographical areas that face the greatest risk of near-term climate impacts are more likely to experience preterm birth, low birth weight, pregnancy complications, and maternal mental health conditions.\(^6\)
The Intersections of Early Childhood Development & Environmental Challenges

Environmental challenges -natural and built- such as pollutants, toxic exposure, overcrowding, housing, and neighborhood quality, all influence early childhood outcomes. Climate change is exacerbating the impacts of these challenges on child development and the quality of life for families. Climate-related challenges such as rising temperatures, flooding, and extreme weather events threaten healthy pregnancy outcomes, create greater risk for developmental delays, increase the likelihood of asthma and allergies, and food insecurity while also increasing stress and affecting the parent’s ability to respond to their children, particularly in times of emergencies. Environmental challenges add to the cumulative stressors already faced by vulnerable populations such as people of color, pregnant women, young children (prenatal to three), and communities with high numbers of low-income families.

Climate and environmental health risks to children are increasingly recognized as an international problem by leaders across the early childhood field. Due to their size, physiology, and behavior, children are more vulnerable than adults to environmental hazards such as climate change. Children are more heavily exposed to toxins in proportion to their body weight and have more years of life ahead of them in which they may suffer long-term effects from early exposure. Any agenda for early childhood development should work to limit the impacts that climate change will have on children throughout their lives.
While climate change is one of the greatest threats to global public health, investments in public health interventions can improve health and quality of life. For example, an increase in public health interventions is linked to reductions in low birth weight. The first three years of life are the ‘brick and mortar’ of brain development and set the foundation for lifetime learning abilities. During this time, a child develops neural connections at an incredible rate of 1 million per second. Whether or not these connections thrive or weaken creates what the Harvard University Center on the Developing Child calls “the architecture” of a child’s brain – a foundation with lasting impacts on his or her future.

Considerations

- Use existing natural areas to increase green infrastructure.
- Coordinate policies and programs across city departments.
- Go beyond city limits to align with local, regional, and state-wide efforts.
- Center family and community voice.
- Ensure physical infrastructures are child sensitive.
- Prioritize young children and families in neighborhood resilience strategies.
Considerations in Action: City Examples

Cities, towns, and villages across America are taking action to address and mitigate the current and future impacts of climate change on their communities beginning in the earliest years. It is important to acknowledge that early childhood development happens well beyond the realms of childcare and formal educational settings. In efforts to meet the needs of all residents, municipal leaders are prioritizing investments in infrastructure and services to address climate and environmental injustices. Climate solutions have immediate benefits for maternal and child health and well-being.

One of the greatest risks to children’s health is air pollution. Increase green infrastructure to reduce particulate pollution and improve air quality. Trees and green spaces can significantly benefit children’s physical, mental, and social development - from infancy into adulthood.

Charleston, South Carolina

Trees are a critical infrastructure that improves our quality of life. In cities across the country, trees are cooling neighborhoods and reducing health-related illnesses. The City of Charleston has two tree planting goals in their 2021 Climate Action Plan for public places as well as private property across the city. Through these goals, this city aims to increase tree planting on private property and plant approximately 1,500 trees on public property annually.
Newark, New Jersey

The Newark Green Team is a multi-sector coalition of local stakeholders actively working to advance policies and programs related to urban sustainability, environmental health, community greening, quality of life, and green economic opportunities for Newark residents.

In cities nationwide, city trees already prevent approximately 1,200 heat-related deaths and countless heat-related illnesses annually.¹⁴

Coordinate policies and programs across city departments to help advance partnerships and a shared vision. City officials can challenge all municipal staff to think specifically about how they can support young children and their families to carry out their core missions.

Tacoma, Washington

In 2018 the Tacoma City Council adopted the Tacoma Mall Neighborhood Subarea Plan, with a unified vision to support growth and make the area a healthy, sustainable place to live, work, play, and shop. One of the first actions of the Subarea Plan to be implemented was the Tacoma Mall Greening Project. Working groups were convened around key issue areas with the City of Tacoma Urban Forestry team, professionals whose work intersected with the Tacoma Mall neighborhood, and community members within the neighborhood itself. The project working group consisted of representatives from the Tacoma Tree Foundation, various City of Tacoma Environmental Services and Arts departments, Pierce Conservation District, Tacoma-Pierce County Health Department, the Nature Conservancy in Washington, and the University of Washington. This multiyear effort enabled knowledge-sharing across departments and organizations whose goals aligned with those of the project.
It’s hard to overstate the importance of strong connections to nature – like good air quality and ample green space – in improving quality of life for residents and families in any city,” NLC President and Mayor of Tacoma, WA Victoria Woodards said. “In Tacoma, we recognized that local government has an important role to play in providing those benefits, and formed partnerships with our community to guide sustainable growth and development in our Tacoma Mall neighborhood that will support our residents for generations to come.”

VICOTRIA WOODARDS
Mayor Tacoma, Washington and NLC President

Boise, Idaho

In 2021, the city of Boise released its Climate Action Roadmap to guide the journey to being carbon neutral by 2050. Climate priorities include improving the natural environment, food systems, water, and innovation and engagement. Informing several priorities is the Boise Environmental Education (BEE), a multi-agency partnership providing environmental lessons and programs to children and adults. BEE partners include Boise Community Forestry, Boise Urban Garden School, Boise WaterShed, The Jim Hall Foothills Learning Center, Zoo Boise. Specific to young children, The Jim Hall Foothills Environmental Learning Center operates an Outdoor Preschool and in West Boise, the Parks and Recreation Department operates the Boise Urban Garden School (BUGS) which focuses on gardening and sustainability.

Align with local, regional, and state-wide efforts to provide the opportunity to leverage efforts and resources across intergovernmental government agencies and state-wide coalitions to improve outcomes and well-being for infants, toddlers, and their families.

Cleveland, Ohio

Lead can harm a child’s growth, behavior, and ability to learn. In 2019, the Cleveland City Council passed historic legislation requiring owners of residential rental units built before 1978 to obtain lead-safe certifications for their properties. The Lead Safe Cleveland Coalition formed and the Lead Safe Resource Center was established. Focused on preventing lead poisoning, the coalition has more than 500 members, 140 organizations, state and local governments, and families impacted by lead. This public-private
partnership founded to address lead poisoning through a comprehensive, preventative, and long-term approach continues to educate the public around the harmful effects of lead poisoning and develop interventions.

In 2023, the Coalition launched the Lead Safe Child Care Program, the first program in the nation focused on remediating lead in childcare settings, whether they are in-home or community-based programs, and providing wrap-around services to childcare programs and families impacted by lead poisoning. This program is administered by Starting Point, northeast Ohio’s early childhood education and youth development organization. Starting Point will coordinate funding, lead remediation and supportive services for childcare programs located in the City of Cleveland.

“As Council President, I’ve made protecting and enhancing the lives of Cleveland’s children a cornerstone in my work. Making our homes lead safe - and working to end evictions - include some of my efforts because our children can only be safe and healthy when they live in safe and healthy homes.”

BLAINE GRIFFIN
Council President, Cleveland, OH

Center family and community voice. The community’s awareness of its direct impact on children and youth can improve and enable the physical and social environment where children live.

Newark, New Jersey

Made up of residents serving in a voluntary capacity, the Newark Environmental Commission is charged to advise the Mayor and the Municipal Council on issues of the environment and sustainability. The Environmental Commission then provides written commentary to the Central Planning Board and Zoning Board of Adjustment. Actions of the Environmental Commission include adopting an Environmental Resource Inventory which is a comprehensive analysis of Newark’s existing environmental health.
Ensure infrastructure is child sensitive. Municipal leaders have an opportunity to significantly reduce the costs of climate change by investing in resilient infrastructure.

Flint, Michigan

The City of Flint’s acquisition of the 47-acre property allowed for a 3-mile paved trail completing the 18-mile path connecting the Flint River and Genesee Valley trails. The Grand Traverse Greenway will lead cyclists and walkers to a multitude of community assets such as Chevy Commons, an accessible and well-connected public green space along the Flint River. This space was designed in alignment with the six guiding principles of the City of Flint Master Plan for a Sustainable Flint: social equity and sustainability; quality of life; youth; reshaping the economy; adapting to change; and civic life.

Prescott, Arizona

The City of Prescott is working on making investments in family-friendly green spaces and parks. Initially, the City and partners conducted an audit to identify family-friendly and ADA-accessible trails. The City and partners host free events for families with young children at different accessible trails through its Nature Niños programming. As part of participation in the Cities Connecting Children to Nature Initiative, the City team compiled and mapped up-to-date data about young children and green space in order to identify needs and inequities across the city. The city developed a tool to assess greenspace and park features and quality in relation to suitability for children ages 0-8. The tool included looking at indicators like sidewalk access, changing tables in restrooms, and play equipment for young children. The City is utilizing the report and GIS maps to inform local city plans and funding priorities in green space acquisition and improvements.

Prioritize young children in families in neighborhood resilience strategies. Severe Weather, exacerbated by climate change, is increasingly impacting early child development through extreme weather events. Extreme events can destroy childcare centers and infrastructure critical to children’s well-being.

Houston, Texas

Creating safe places of refuge in communities that also build neighborhood resilience between disruptions and disasters, the City of Houston developed a resilience hub model called “Lily Pads”. The City will work with partners to develop a pilot Lily Pad, which
could be at a school or other public facility like a neighborhood library or at a campus or non-profit facility. Ultimately, having Lily Pads established in many of Houston’s neighborhoods will help to prepare for, respond to, and recover from future disruptions and disasters.

Climate displacement carries serious risks, especially for children, who will suffer impacts to their health and nutrition that can last a lifetime.²

Displacement of communities by extreme weather events can disrupt access to health care, including prenatal and newborn care, as well as access to social support and other services, which can adversely affect the health of pregnant and postpartum people and newborns.

Children’s development and well-being are affected by all aspects of the neighborhoods where they live – from whether they have access to healthy food and green spaces, to how safe their community is and whether residents have a sense of hope for their future. Local government has a role to play in building and strengthening communities where all children can grow and live healthy lives.

Explore the resources below to learn more and subscribe to the ECS quarterly newsletter to hear updates on how cities are supporting young children and families.

The Prenatal-to-Three Impact Champion Toolkit

Equitable Early Care and Education: An Alignment Framework

Prenatal-to-Three Outcomes Framework Data Guidebook

Place Matters: The Environment We Create Shapes the Foundations of Healthy Development

Early Years and Climate Provisions in the Inflation Reduction Act

Toolkit: Creating Systems-Level Change in Cities
About National League of Cities

The National League of Cities (NLC) is the voice of America’s cities, towns and villages, representing more than 200 million people. NLC works to strengthen local leadership, influence federal policy and drive innovative solutions. NLC’s Center for City Solutions provides: (1) research and analysis on key topics and trends important to cities, (2) creative solutions to improve the quality of life in communities, (3) inspiration and ideas for local officials to use in tackling tough issues, and (4) and opportunities for city leaders to connect with peers, share experiences and learn about innovative approaches in cities.

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With generous support from the Pritzker Children’s Initiative, NLC through its Early Childhood Success program is exploring effective strategies that can be used to integrate PN-3 efforts into city-wide policies and practices. This brief aims to support municipal leaders as they build equitable systems that impact outcomes for children and families during the PN-3 developmental period.

Contact

Want to learn more about municipal support for children and families during the PN-3 period? Reach out the National League of Cities’ Early Childhood Success Team at ECteam@nlc.org.
Endnotes


7 Author(s) UNICEF, & UNICEF. (2021, August 1). The climate crisis is a child rights crisis. UNICEF. https://www.unicef.org/reports/climate-crisis-child-rights-crisis


