Provider Preparedness Tool:

Strengthening Child Care Homes and Spaces for Emergencies

FEBRUARY 2026

HOME GROWN

LISC

About

HOME GROWN

Home Grown is a national collaborative of funders, caregivers, and providers working together to advance an inclusive child care system where home-based child care is visible, valued, and well-resourced. In October 2024, with input from existing grantees and partners on the ground, Home Grown established the Home-Based Child Care Emergency Fund for Severe Weather & National Disaster Response to address immediate needs among home-based child care providers impacted by national disasters and severe weather events. To date, the fund has extended direct cash assistance and other support to home-based child care providers impacted by Hurricanes Helene and Milton, the LA Wildfires, and severe storms in the state of Arkansas.

LISC

LISC is one of the country's largest community development organizations, helping forge vibrant, resilient communities across America. LISC works with residents and partners to close gaps in health, wealth, and opportunity so that people and places can thrive. Since its founding in 1979, LISC has invested $35 billion to create more than 530,457 affordable homes and apartments, develop 83 million square feet of retail, community, and educational space, and help tens of thousands of people find employment and improve their finances. In the fields of early childhood facility policy, financing and practice LISC has been an advocate, thought leader and resource for more than two decades. Leveraging our national network of partners, we offer new models, partnerships and funding streams to connect providers to the right capital and resources, to build the supply of child care and early learning opportunities for children and families. For more, visit www.lisc.org.

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SECTION

1 Context of the Problem

In recent years, severe weather and natural disasters in the U.S. have become more frequent. Floods, hurricanes (including both wind damage and flooding), wildfire, ice storms, and extreme heat pose growing risks to communities, especially those already facing economic or housing instability. These disasters unfold in different ways. Some are episodic, like a sudden wildfire or hurricane, while others are chronic, building over time through repeated heatwaves, prolonged droughts, or back-to-back storm seasons. Regardless of how they materialize, these events can have serious consequences for the health and well-being of children and families. They can also disrupt the trusted care networks that are critical to children's growth and learning and to families' economic security.

Home-Based Child Care (HBCC) providers and caregivers can be uniquely sensitive to the impacts of natural disasters, when damages to their home and community can also mean damage to their businesses and livelihoods. Housing shortages, displacement, and bottlenecks and delays in accessing assistance, insurance, and reimbursements can all complicate recovery. For some, the ability to return to work and reopen their program is directly tied to recovering their home. At the same time, HBCC providers play an important role in helping their families and communities prepare for, respond to, and recover from disasters.

This tool is specific to HBCC and small scale center-based provider preparedness: taking proactive steps before a disaster to reduce harm and impact from severe weather and natural disasters. Recovery begins after the immediate danger has passed and focuses on rebuilding, reconnecting, and regaining stability. Both preparedness and recovery are essential to building resilience, especially for HBCC providers who serve as a vital link in the support system for communities.

This preparedness tool was developed through a partnership between Local Initiatives Support Corporation (LISC), a national community development financial institution (CDFI), and Home Grown, a national collaborative dedicated to supporting HBCC providers and caregivers. The tool draws on LISC's extensive technical expertise in child care facility development and Home Grown's experience providing direct cash assistance to HBCC providers recovering after disasters through its Emergency Fund for Severe Weather and National Disaster Response.

HBCC providers play an important role in helping their families and communities prepare for, respond to, and recover from disasters.

This preparedness tool is built on the lessons learned from Home Grown's recovery work. It is informed by conversations with HBCC providers and partners, who shared their first-hand experiences and insights into what works to mitigate harm, and what supports may be missing, when disasters occur. Through these conversations, HBCC providers described the damages they experienced from natural disasters, including hurricanes, ranging from power outages and food loss

"My power (lights) were out for 9 days - I lost all refrigerator and freezer food."

to structural and outdoor damages

> *"My shades over the play area were ruined and the poles to hold them up had to be replaced. Some of the outdoor toys and the mulch had to be replaced in the play area. Also food had to be replaced from the power being out for too long, and the floor and wall had to be dried and cleaned out."*

to total housing loss

> *"...we experienced the loss of our home as well as property damage. We are still in the process of replacing things and getting back into a new home."*

While providers noted how Home Grown's emergency funds aided their recovery

> *"The funds were very helpful; they helped run our generator and helped replenish some of the food we lost from power outages"; "These funds came quickly so were used for my most immediate needs to be able to live in my home and reopen the child care - replacing indoor and outdoor toys and materials, structural repairs, and driveway access"*

their experiences highlight how critical it is to support preparedness ahead of emergencies in order to minimize damages in the aftermath. As one provider shared,

> *"Knowing that I have money set aside helps reduce stress during unexpected events such as hurricanes."*

This preparedness tool aims to help providers build that same peace of mind before an emergency hits.

The following sections offer small scale center-based and HBCC providers practical steps to prepare for natural disasters and severe weather events, such as extreme heat, flooding, fire emergencies, thunderstorms, and winter storms. The tool includes guidance, checklists, and strategies to help providers plan for both immediate preparedness steps and longer-term investments to protect themselves, their families, their businesses, and the children they care for.

ACRONYMS

FEMA: Federal Emergency Management Agency

FF&E: Furniture, Fixtures and Equipment

HBCC: Home-Based Child Care

HEPA: High Efficiency Particulate Air

HVAC: Heating, Ventilation and Air Conditioning

MEP/FP: Mechanical, Electrical, Plumbing/ Fire Protection systems

NOAA: National Oceanic and Atmospheric Administration

GLOSSARY

Air infiltration or **air leakage** occurs when outside air accidentally or unintentionally gets into a building, typically through cracks or gaps.

Alternative or **back-up power sources** provide energy when the primary power source fails. Alternative or back-up power sources include batteries, power banks, and generators.

Anchors, fasteners, or **straps** are building materials used to secure and stabilize appliances, furniture, fixtures, equipment, and/or devices.

Assets are physical items or non-physical resources owned by a child care provider or program that have or could have economic value. Examples of tangible or physical assets include cash, a building or home, land or property, appliances, devices, equipment, furniture, fixtures, tools, and supplies. Assets can also include improvements made to a building or home over time. Examples of intangible or non-physical assets include brand reputation, copyrights, and trademarks. Assets that are essential for a child care provider or program to function are called operating assets.

Backflow prevention devices are plumbing fixtures that protect a home or center's drinking water supply by preventing contaminated or polluted water from backflowing into the system.

Base flood elevation is the calculated level or elevation to which floodwaters are expected to rise during a flood.

Building systems are the systems (Mechanical, Electrical, Plumbing, and Fire Protection) and components within a home or center that provide access to the essential services buildings need to be functional and comfortable.

Caulk and **sealants** are building materials applied to seal and fill gaps, leaks, or cracks to block the passage of air and moisture.

Class A roofing systems are roof systems made using the highest rated or most effective fire-resistance roof coverings and materials.

Cool roofs are a type of future-proof roof system that utilizes materials, coatings, and/or colors to deflect the sun's rays and reduce the amount of heat coming into a building which can lower the amount of air conditioning required to cool a building.

Critical utilities provide access to the essential services and systems like electricity, gas, water, and sewage that buildings need to be functional and comfortable.

Downspouts or **gutters** are roof drainage system components that catch and direct rainwater or melted snow away from a building's roof and foundation to prevent water damage.

Egress is the path to exit or way out of a building.

Electrical systems supply electricity to appliances, fixtures, equipment, and devices within a building including lighting systems.

A building's **Envelope** protects occupants from external elements, like severe weather, and the building itself from decay, mold, and other conditions that can make it unsafe or unhealthy. A building's envelope components include walls, windows, doors, roofs, and insulation.

Exterior sheathing is a layer of a building's exterior wall system that provides structural support, insulation, and acts as a weather barrier.

Fire protection systems detect, control, extinguish, and alert building occupants to fire or smoke.

Fortified roofs are a type of future-proof roof system that goes beyond basic building code to reduce the risk of damage caused by severe weather like extreme winds, hurricanes, and hail. To be eligible for an official FORTIFIED designation, a written certification issued by the Insurance Institute for Business and Home Safety (IBHS), a roof must meet certain criteria. For more information visit https://fortifiedhome.org/.

Future-proof roofs are roofing systems designed to better protect a building from damage caused by severe weather. Cool roofs, green roofs, solar roofs, and fortified roofs are examples of future-proof roof systems.

Green roofs are a type of future-proof roof system that utilizes vegetation and other materials to provide shade, remove heat, absorb rainwater, and provide additional insulation.

Hazards are potential sources of harm that may cause property damage, physical injury, and/or economic hardship.

Heat tracing refers to heat tracing equipment like cables that maintain or raise the temperature of a pipe, preventing freezing, and protecting a building's plumbing system.

HEPA filters are high efficiency particulate air filters installed in air purifying appliances, equipment, and/or devices to improve indoor air quality by removing airborne contaminants or pollutants.

High efficiency products or systems use less energy and perform the same or better than traditional products or systems. High efficiency products or systems sometimes have higher up-front costs but usually cost less over time when energy and maintenance savings are factored in.

HVAC filters are filters installed in mechanical systems heating, ventilation, and air conditioning appliances and equipment to improve indoor air quality by removing airborne contaminants or pollutants.

Indoor air quality is the healthiness of the air inside a building which can be affected by contaminants such as mold or bacteria, dirt and dust, gases like carbon monoxide, or other unhealthy or unsafe emissions.

Infrastructure refers to the physical components, systems, and structures that support the function, use, and overall safety of a building. Infrastructure includes outdoor features that contribute to a building's ability to function like parking lots, sidewalks, and landscaping.

Insulation systems are building materials and components that create a thermal barrier to keep buildings warm in the winter and cool in the summer. Insulation systems can enhance a building's energy efficiency and overall durability.

Interior shut off valves are devices used to control (i.e., shut off) the flow of water through a pipe and protect a building's plumbing system.

Mechanical systems typically include heating (e.g., furnaces, boilers), ventilation and air conditioning (**HVAC**) systems that provide thermal comfort and control indoor air quality.

Natural disasters are sudden and terrible events caused by natural forces that usually result in serious damage, destruction, and disruption to human lives, property, and the environment.

Nonstructural components of a building include building systems, spaces, and

elements that are not structural, meaning they don't support a building's load or weight.

Plumbing systems supply drinking water and manage wastewater.

Preparedness solutions are proactive measures child care providers can take in advance to effectively respond to emergencies, minimize damage, and streamline recovery.

Rain gardens are shallow garden areas planted with low-maintenance vegetation that naturally collect and absorb rainwater runoff from roofs and driveways.

Retrofits refer to upgrades, improvements, and/or enhancements made to an existing building that improve aspects like comfort and safety, energy efficiency, and overall durability.

Roof drainage systems are a collection of building materials and components designed to catch and direct rainwater or melted snow away from a building's roof and foundation to prevent water damage. Roof drainage system components include downspouts and gutters.

Roof flashing is roofing material that acts as a water resistant barrier directing rainwater or melted snow away from a building's roof to prevent water damage.

Roof slope or **pitch** refer to the steepness or vertical rise of a building's roof system.

Severe weather is any dangerous meteorological or weather occurrence with the potential to cause damage, destruction, and disruption to human lives, property, and the environment.

Solar heat gains occur when heat from the sun's rays enters a building or space through windows, doors, or other openings.

Solar roofs are a type of future-proof roof system that utilizes solar panels or solar singles to capture and convert the sun's rays into a power source like electrical energy.

Stormwater planters are containers or contained areas planted with low-maintenance vegetation that naturally collect and absorb stormwater runoff.

A building's **Structure** is the framework and foundation that supports the building's load or weight and stability. A building's structural components include foundations, beams, columns, and slabs.

Thermal comfort refers to a feeling of well-being or comfort people experience in an indoor environment based on temperature or thermal conditions (i.e., not too hot or too cold).

Weatherization refers to the process of upgrading and improving a building to better protect it from weather elements. Effective weatherization efforts improve insulation and enhance a building's energy efficiency and overall durability.

Weatherstripping products are building materials and products used to seal gaps or cracks, prevent air leakage, improve insulation, and enhance a building's energy efficiency and overall durability.

Window treatments are window attachments or coverings that manage natural light, prevent air leakage, improve insulation, provide privacy, and enhance a building's energy efficiency and overall durability. Window treatments can be installed inside or outside a building. Examples of window treatments include blinds, shades, curtains, high-performance or impact-resistant films, shutters, solar screens, and storm windows.

SECTION 2

Framing Considerations

Whether children are being cared for at a family home business or an early care center, they need safe and welcoming spaces to learn and grow. Centers or facilities purposefully built for child care follow specialized standards that support best practices. Oftentimes, many providers operate in spaces not originally built for child care but nevertheless, create well-maintained, safe, and engaging spaces that boost learning. Providing and maintaining high-quality learning environments is critical for children's healthy growth and development.

In many communities, families are already paying as much as they can afford, even though this amount rarely covers the true cost of operating the program. Unlike other businesses, child care providers cannot easily pass costs onto families as child care is often the largest expense in a family budget. Given the industry's tight operating margins, early childhood programs are especially sensitive to the need to use resources efficiently and pursue cost savings whenever possible. Funding constraints can force providers to find the cheapest possible way to make repairs or postpone them indefinitely.

Postponing maintenance is one common way providers try to save money. This practice is called "deferred maintenance," and while understandable given budget constraints, it can lead to more frequent and higher repair costs over time, sooner-than projected replacement costs, and equipment that may not deliver the quality of service that it should. Maintenance and quality improvement measures are more expensive for HBCC providers and exponentially more complicated for providers who rent their homes as they are subject to owner/landlord approval.

Home Grown and LISC created this preparedness tool with the understanding that providing high-quality child care is expensive and providers across the country struggle every day to balance quality standards with financial viability. This tool offers provider preparedness strategies to retrofit or strengthen existing infrastructure.

The provider preparedness strategies presented in this tool:

- Account for the varying building types and geographic locations of the physical spaces supporting child care programs.
- Account for differing circumstances among providers who are property owners and providers who rent or lease their caregiving spaces.
- *Do not* account for the singular infrastructure conditions of manufactured or mobile homes.
- Providers caring for children with special needs should consult licensed professionals as they will need to take additional precautions to safely accommodate and protect those populations. The Partnership for Inclusive Disaster Strategies (PIDS) is a great resource working at the intersection of disability justice and disaster preparedness and response.

Home Grown and LISC created this preparedness tool for HBCC providers, small scale center-based providers, small business owners, providers who are property owners, providers renting or leasing their caregiving spaces, property owners renting or leasing their space to child care providers, informal or unlicensed caregivers, policymakers, funders, local governments, community organizations, advocates, and parents.

Above all, Home Grown and LISC created this tool to offer providers some reprieve so they can focus on their most important task, caring for children.

SECTION 3

Provider Preparedness

Early learning and child care providers understand better than most the importance of preparedness. Much like small children, the weather can be unpredictable and fast moving and caregivers must be prepared to respond to a multitude of scenarios appropriately and effectively.

3.1. Programmatic & Financial Preparedness

This tool will cover physical infrastructure renovations, improvements, upgrades, and maintenance that may help providers mitigate the effects of severe weather and natural disasters. First and foremost, it is crucial that providers are prepared programmatically and financially. See: Reducing the Financial Toll of Emergencies and Reducir el impacto financiero de las emergencias.

State Regulated Emergency Preparedness Plans

Environmental health and safety standards are non-negotiable and must be continuously maintained over time. To truly ensure a child care program is healthy and safe for kids, it is important to become familiar with and adhere to state child care licensing standards and local regulations. **State specific information** about child care licensing regulations, agencies, policies, and requirements including **emergency preparedness** is available in the National Database of Child Care Licensing Regulations.

Severe Weather & Natural Disaster Information & Alerts

A key component of provider preparedness is access to accurate and up-to-date information on local, regional, and national weather events.

- AirNow has the latest information on local air quality and wildfire smoke
- NOAA Weather Radio broadcasts official Weather Service warnings, watches, forecasts, and other hazard information 24/7
- FEMA's app sends users real-time weather and emergency alerts
- Zello is an app with a walkie-talkie feature that allows users to send and share audio communications within their organization's private network
- The Red Cross Emergency app delivers official Weather Service alerts, live weather maps, and access to preparedness guides and local Red Cross services

Asset Inventory, Valuation & Insurance

Providers, particularly property owners, should create and maintain a thorough inventory of their assets and accurately assess their value for insurance and recovery purposes. This can feel tedious or overwhelming but is well worth it. There are even templates available for download that you can edit to meet your needs, for example, this Asset Inventory Template. It is imperative for providers to understand the types of insurance coverage needed (i.e., Homeowner's Insurance, Business Property Insurance, Commercial Business Liability Insurance, and/or Fire, Flood, Hurricane, Tornado Insurance) and invest in policies that adequately cover potential disaster-related losses. For more information see: How Insurance Protects You in an Emergency and Cómo lo Protege el Seguro en Caso de Emergencia.

Important note about flood insurance: Flood insurance is typically *not* included in regular homeowner's insurance. Once flood insurance is purchased, it's important to make sure that the policy covers both contents (i.e., the belongings inside the house) and the structure of the house itself. Flood insurance is available to homeowners and renters; however, renters can only insure contents, since they do not own the home.

We also recognize that insurance policies may be expensive and that in the event of severe weather or a natural disaster, payouts can sometimes be inadequate or delayed. A good advocacy partner for navigating these challenges is the Equitable and Just Insurance Initiative.

Join LISC for a 1-hour workshop where we'll hear directly from a small business owner on their lived-experience and work on your plan in real-time for recovering from any unexpected challenges your business may face.

Critical Records

Organizing and securing critical caregiving and business records is essential. Providers' business records should be readily accessible and updated regularly. Business records may include but are not limited to:

- state-licensed child care provider certificates and paperwork
- drivers' licenses, passports, or other forms of identification
- mortgage and property deeds or rental or lease agreements
- car titles
- insurance policies and policy numbers
- medical records
- warranties and receipts for major purchases
- financial records
- list of emergency contacts
- child identification cards

Hard copies of a provider or program's business records should be scanned onto a computer. The electronic copies of a program's business records should be stored digitally and on a flash drive. Hard copies of a provider or program's business records should be securely stored in a safe deposit box or a fire-and-flood proof safe.

Funding Sources

Establishing a rainy day fund is advised but understandably not always possible. Providers should also identify private and public grant programs and alternative funding sources for financial preparedness and recovery efforts. For more information see Section 5 and FEMA's Disaster Resource Identification Fact Sheet.

For recovery-related resources see Home Grown's HBCC Emergency Fund for Severe Weather and National Disaster Response.

3.2. Infrastructure Preparedness

According to the American Red Cross, regardless of where they live, **ALL PROVIDERS** should be prepared for the following types of severe weather and natural disasters:

EXTREME HEAT kills more people than any other weather event; it occurs when outdoor heat index values meet or exceed a daytime high of 89° F

FLOOD waters carry waste and pollute drinking water; they can result from rain, snow, coastal storms, storm surges, overflows of rivers, and dam failure

FIRE EMERGENCIES include **HOME FIRES**, the most common type of emergency, and **WILDFIRES**, or unplanned fires in natural areas

THUNDER STORMS often bring powerful winds that can knock down trees and power lines, intense rainfall that causes flash floods, lightning strikes that can spark fires, tornadoes, and damaging hail

WINTER STORMS can bring extreme cold, freezing rain, sleet, heavy snowfall, ice, and high winds causing transportation, heat, power, and communication disruptions

POWER OUTAGES often occur during severe weather and natural disaster instances. As severe weather events and natural disasters increase, so does the stress on our electrical grids. Electrical power is essential for water, heating, ventilation and air conditioning (HVAC), indoor air quality, lighting, refrigeration, the internet, medical equipment, and various appliances. Planned or unexpected, power outages can last for days or longer, and providers should be prepared for the increasing likelihood of operating programs without electricity. Providers can mitigate the consequences of power outages with access to funds for the purchase and safe installation of:

- Emergency Lighting & Signage (Figure 1A)
- Easily Accessible Storage for Emergency Supplies
- Surge Protectors (Figure 1B)
- Shutoff Tools for Critical Utilities (Figure 1C)
- Alternative or Back-Up Power Sources (Safe Generator Usage Fact Sheet)

Figure 1A

Figure 1B

Figure 1C

Water quality issues occur when water distribution systems are disrupted by flooding events or power outages, preventing access to safe drinking water and wastewater utilities. Child care programs with private water sources like wells will likely be unable to access water during a power outage as well pumps are almost always powered by electricity. All providers, even those reliant on public water supply systems, should stock reserve water and sign up to receive local alters or advisories. For more information on water system disruptions and quality issues, providers should consult their local health departments.

Indoor Air Quality problems can originate within a building from mechanical systems disruptions due to power outages or be drawn in from contaminated outdoor air. Operable windows are essential to maintain indoor air quality and thermal comfort during power outages. If operable windows are not accessible and/or outdoor air quality is compromised, providers should utilize an alternative or back-up power source to power existing ventilation systems and/or battery powered equipment like portable fans and air cleaners.

Fire Safe child care settings should have current fire safety evacuation and egress plans (Figure 1D) and functioning fire protection equipment like portable fire extinguishers and battery powered fire alarms, smoke detectors, and carbon monoxide detectors.

Location-Based awareness in terms of the type and frequency of severe weather and natural disasters that occur in the geographic location providers are operating in is crucial for provider preparedness. FEMA's National Risk Index (NRI) is a resource that can help providers identify potential **hazards** specific to geographic location. Providers can also contact state emergency management agencies for more information on location-based severe weather and natural disasters.

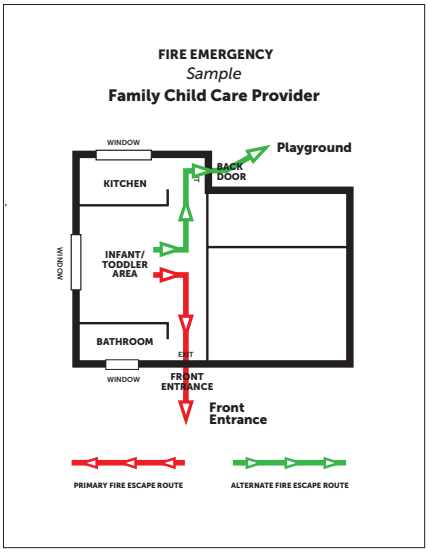


Figure 1D

Preparedness Professionals

Details about the building providers are operating programs out of like type, location, and age are critical to understanding and identifying possible **hazards** that may need to be addressed and **preparedness solutions** that providers can execute in advance to effectively respond to emergencies, minimize damage, and streamline recovery. **State licensed professionals** and **qualified experts** can help providers tailor **preparedness solutions** to fit the unique needs of their programs and physical spaces.

Providers should consult state licensed professionals, qualified experts, and/or local agencies before making any changes. Providers can also contact child care resources and referral agencies if they aren't sure where to start.

STATE LICENSED PROFESSIONALS

CONSULTANT	AREA OF EXPERTISE	ID HAZARDS AND PROPOSE SOLUTIONS
Architect	Overall building design	All building aspects
Landscape Architect	Outdoor space design	Yards, patios, vegetation
MEP/FP Engineer	Building systems (e.g., Mechanical, Electrical, Plumbing, Fire Protection)	Thermal comfort, lighting, water distribution systems, indoor air quality, fire protection systems
Structural Engineer	Building structure	Foundations, connections, roofs systems, exterior walls
Civil Engineer	Site infrastructure systems	Well water systems

Qualified experts' licensing requirements vary significantly by location, with some states having specific general contractor licensing boards and others requiring only local business permits.

- **GENERAL CONTRACTORS** manage and oversee all aspects of a construction project.
- **SUBCONTRACTORS** are usually hired by general contractors to complete specific project work types like electrical, plumbing, or carpentry.
- **CERTIFIED INSTALLERS** are trained and certified by manufacturers (i.e., roofing systems, window systems, flooring systems) and exclusively install their products.

RELEVANT RESOURCES

- LISC's Securing an Architect Guide
- LISC's Securing a Contractor Guide
- LISC's Child Care Center Facilities Development & Financing Guide

Important note about contractor fraud: Unfortunately, following a severe weather event or natural disaster there can be an increase in contractor fraud. Providers should always verify contractors' identities, check that they are properly licensed, and ask for references from recent clients to protect against fraud. The Consumer Financial Protection Bureau (CFPB) provides tips for protecting against fraud and scams following a disaster and Emergency Legal Responders offer disaster-related legal information and tools for preventing and combating fraud and scams.

Preparedness Solutions

Preparedness Solutions are proactive measures child care providers can take in advance to effectively respond to emergencies, minimize damage, and streamline recovery. The preparedness solutions presented in this tool are organized by scope and cost. Providers should implement what is feasible given their resources. Every step toward provider preparedness is meaningful, regardless of where you start.

RENOVATIONS include replacement, repair, and/or new installation strategies that **optimize** provider preparedness. These strategies likely require the assistance of outside professionals, and costs range from moderate to high.

FURNITURE, FIXTURES & EQUIPMENT (FF&E) AND MATERIALS include enhancement or upgrade strategies that **improve** provider preparedness. These strategies may require the assistance of an outside professional, and costs range from low to moderate.

MAINTENANCE ACTIVITIES are **ongoing** and ensure continuous provider preparedness. Some of these strategies may require the assistance of an outside professional; many can be completed by trained staff and typically costs are minimal.

UNIVERSAL SOLUTIONS are severe weather and natural disaster emergency preparedness solutions *all providers* should consider regardless of their geographic location.

SPECIFIC SOLUTIONS are specific severe weather and natural disaster emergency preparedness solutions that providers should consider based on their geographic location (i.e., see map).

BEST PRACTICES are among the **most effective** strategies for provider preparedness. These strategies are likely to require the involvement of outside professionals and can be expensive to implement.

The following preparedness solutions should be interpreted as suggestions based on a culmination of resource review and expert insight. We cannot guarantee these will prevent property damage or personal injury caused by severe weather and natural disasters.

Structural and Envelope Preparedness Solutions

A home or a center's **structure** (Figure 2A) is the framework and foundation that support the building's load or weight and stability. Structural building components include foundations, beams, columns, and slabs. A home or a center's **envelope** (Figure 2B) protects occupants from external elements, like severe weather, and the building itself from decay, mold, and other conditions that can make it unsafe or unhealthy. Envelope building components include walls, windows, doors, roofs, and insulation. The building envelope is an essential part of the overall building structure. It is important that providers are aware of a building's durability details like the structural and envelope component conditions, types, and materials.

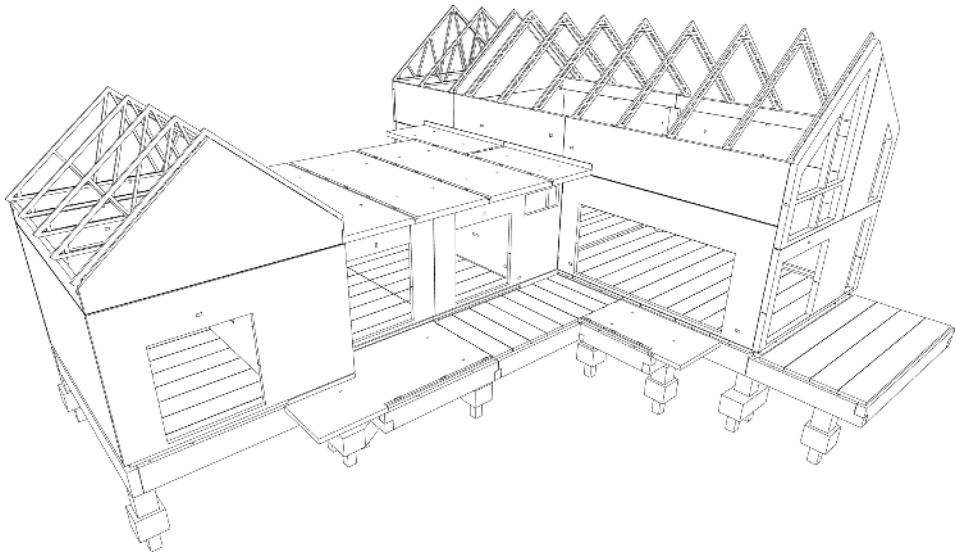


Figure 2A
A building's structure

Figure 2B
A building's envelope

Providers renting or leasing their space should work with landlords to establish a clear understanding of what building components the landlord is responsible for versus what the provider is responsible for in terms of general maintenance and emergency preparedness. These responsibilities should be clearly reflected in the lease agreement.

RENOVATIONS	UNIVERSAL SOLUTIONS	SPECIFIC SOLUTIONS
Optimized Roof strategies Roofs (Figure 2C) can be a point of vulnerability or strength. Poorly maintained roofs can be extremely hazardous. Alternatively, optimized roofs can increase a building's energy efficiency, improve durability and enhance indoor comfort and safety.	**Repair or replace roof systems**	Install Class A roofing system Increase roof slope or pitch Install cool roof or reflective surfacing
	Repair or replace roof covering, drainage and insulation systems	Install impact-resistant shingles Enhance roof flashing and drainage systems
	Eliminate exposed vents or install vent screens	Install fire-resistant vents
Optimized Envelope strategies A stable and safe building begins with a solid structure and optimized envelope. Optimized building envelopes leverage exterior components, materials, and finishes for enhanced occupant safety and indoor comfort, increased energy efficiency and improved overall building durability.	**Replace exterior wall coverings and/or install layer of exterior insulation**	Install noncombustible exterior siding Install water-resistant exterior sheathing
	Replace windows and exterior doors (Figure 2D & 2E)	Install high-performance glass window systems Install safety glass window systems and impact-rated doors
	Install exterior window attachments or coverings	Install storm windows or shutters Install solar screens or shades
	Replace or insulate garage door	Install wind-rated garage door

The Energy Efficient Home Improvement Credit rewards property owners for making certain energy-efficient upgrades to existing homes. The Department of Energy's Weatherization Assistance Program can help determine eligibility for and identify state and local agencies that provide weatherization services.

ROOFING SYSTEM

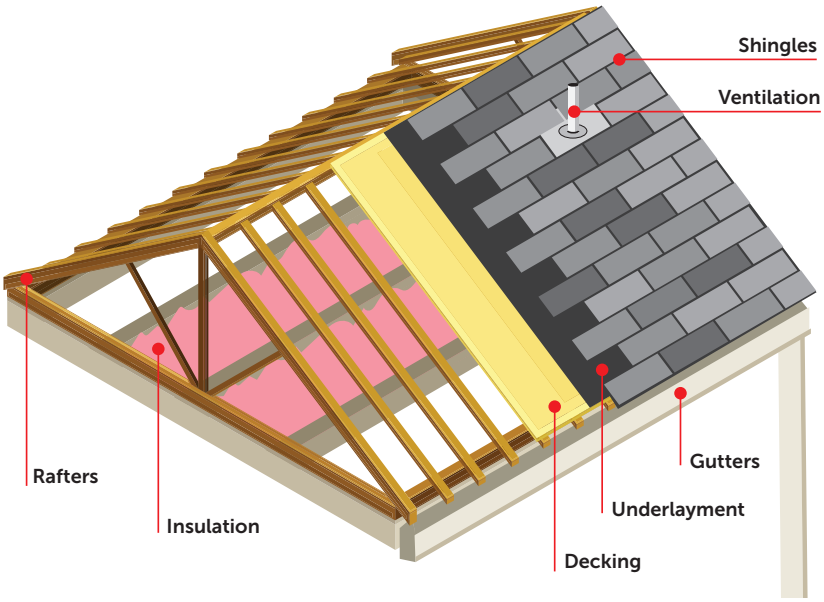


Figure 2C
Roof

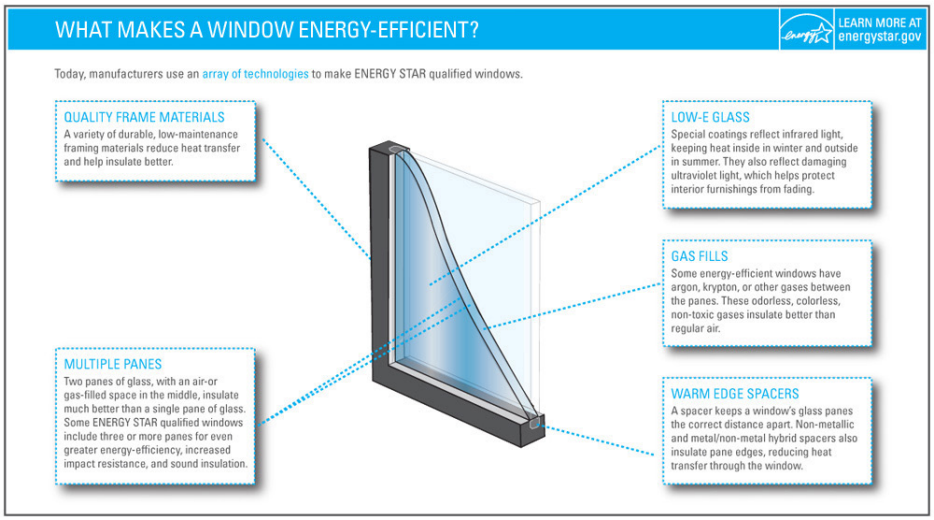


Figure 2D
Windows

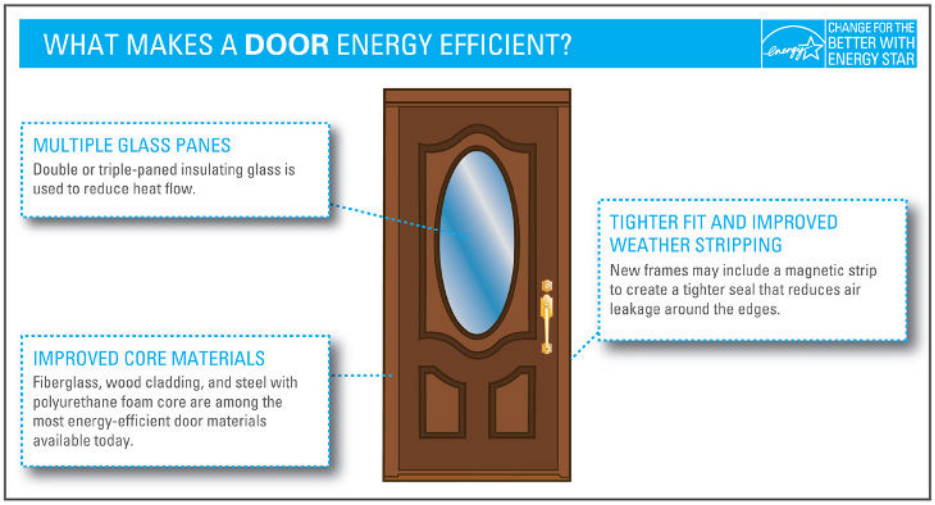


Figure 2E
Doors

FF&E AND MATERIALS	UNIVERSAL SOLUTIONS	SPECIFIC SOLUTIONS
Envelope Improvement strategies One of the simplest but more effective strategies to improve a building's envelope is weatherization. This keeps a building warm in the winter and cool in the summer, saving energy and money. Install new or enhance existing weatherization systems.	**Seal gaps or cracks around openings in exterior walls and roof systems**	Apply moisture-resistant caulk and sealants Apply fire-resistant caulk and sealants
	Insulate unfinished attic or crawl spaces	Install moisture-resistant insulation
	Seal gaps or cracks around windows and doors	Install weatherstripping products
	Install new or enhance existing windows and doors	Install window treatments to protect against solar heat gain and air infiltration Apply window shatter-resistant film Install heavy-duty deadbolts on doors

To better protect property investments, providers should always ask about product and labor warranties!

MAINTENANCE ACTIVITIES

Regularly inspect, secure, and/or clean the building's structure and exterior components:

- ☐ Roof systems for any signs of damage, debris, cracks or blisters, pooling water, sagging areas, sealing issues, and leaks
- ☐ Roof draining systems (i.e., downspouts and gutters) are free of debris and positioned to allow water to flow away from the building's foundation
- ☐ Water flow around the property is properly draining away from the building
- ☐ Foundation for any signs of damage, cracks, or shifts
- ☐ Exterior walls for any signs of cracks in the paint or siding material
- ☐ Exterior doors and garage doors for any signs of damage
- ☐ Windows for any signs of leaks, cracks in the paint or material, sealant cracks or breaks, and problems with mechanisms for opening and closing
- ☐ Window shutter systems for any signs of corrosion or damage

RELEVANT RESOURCES

- LISC's Maintaining Your Child Care Facility Guide
- LISC's Child Care Physical Environment Checklist
- LISC's Family Child Care Checklist
- LISC's Raising the Roof Webinar

BEST PRACTICES: FUTURE-PROOF ROOFS

Installing a future-proof roofing system is a proactive approach child care providers can take in advance to effectively respond to emergencies, minimize damage, and streamline recovery. Future-proof roofs can enhance the value of a home or center, increase energy efficiency, leading to cost savings and better protect a building from damage caused by severe weather. There are different types of future-proof roofing systems including **solar roofs**, **green roofs**, and **cool roofs**. Cool roofing systems utilize materials, coatings, and/or colors to deflect the sun's rays and reduce the amount of heat coming into a building which can lower the amount of air conditioning required to cool a building. Roofs with white or light-colored reflective coating, metal roofs, and tile roofs are types of cool roofing systems. Cool roofs can usually be installed without requiring major structural roof work making them less expensive than other future-proof roofing systems. Cool roofs may be more beneficial to providers located in urban areas, areas with longer sunlight hours and/or areas that often experience extreme heat. Many states and cities offer Cool Roof Financial Incentives, like New York City's NYC CoolRoofs programs, which install cool roofs at no or low cost to select buildings with priority given to non-profits and affordable housing. **Fortified roofs** can also protect against future damage from severe weather like extreme wind, hurricanes, and hail. Fortified roofs are built to specific standards using specialized construction materials and methods. There are local programs across the country supporting fortified roof installation like the Louisiana Just Recovery Network, in southern Louisiana. To be eligible for an official FORTIFIED designation, a written certification issued by the Insurance Institute for Business and Home Safety (IBHS), a roof must meet certain criteria. For more information visit https://fortifiedhome.org/.

PREPAREDNESS PROFESSIONALS

Seeking more information about a home or center's roof system?	Consult a **licensed architect,** a **general contractor** who specializes in roof systems, and/or a **certified installer** who specializes in roof systems
Seeking more information about a home or center's exterior wall system?	Consult a **licensed architect,** a **general contractor** who specializes in exterior wall systems, and/or a **certified installer** who specializes in exterior wall systems
Unsure of a home or center's overall structural integrity or specific structural connections (i.e., roof-to-wall, wall-to-wall and wall-to-foundation) vulnerabilities?	Consult a **licensed structural engineer** and/or **general contractor** who specializes in reinforcing existing structures
Interested in replacing or repairing windows?	Consult a **general contractor** who specializes in window systems and/or **certified installer** who specializes in window systems
Interested in a home or center energy audit?	Consult a **licensed MEP engineer**
Interested in air sealing testing?	Consult a certified home energy assessor

Nonstructural Preparedness Solutions

A home or a center's **nonstructural** components include building systems, spaces, and/or elements that are not structural, meaning they don't support a building's load or weight. Nonstructural components of a building protect occupants from outdoor and indoor conditions that could make a space unsafe or unhealthy.

Building Systems

Building systems are the systems (Mechanical, Electrical, Plumbing, and Fire Protection) and components within a home or center that provide access to the essential services buildings need to be functional and comfortable. **Mechanical systems** typically include heating (e.g., furnaces, boilers), ventilation and air conditioning (**HVAC**) systems that provide thermal comfort and control indoor air quality (Figure 3A). **Electrical systems** supply electricity to devices and equipment within a building including lighting systems. **Plumbing systems** supply drinking water and manage wastewater. **Fire Protection systems** detect, control, extinguish, and alert building occupants to fire or smoke. Mechanical, electrical, plumbing, and fire protection (**MEP/FP**) systems equipment and distribution networks are a crucial part of a building's overall capacity to create a safe and healthy indoor environment. It is important that providers are aware of a home or center's building systems durability details like type, age, and condition of equipment.

RENOVATIONS	UNIVERSAL SOLUTIONS	SPECIFIC SOLUTIONS
Optimized Building Systems strategies Optimized building systems, including equipment and distribution systems, improve the health and safety of indoor environments. They also increase a building's overall energy efficiency, leading to immediate and long-term cost savings.	**Replace or upgrade heating, ventilation and air conditioning system(s)**	Install high efficiency HVAC systems
	Test and upgrade critical utilities equipment to meet code and load requirements	Relocate or elevate utilities to base flood elevation
	Upgrade fire safety and protection systems	Install residential sprinkler and/or smoke alarm system
	Safeguard water distribution systems	Install backflow prevention device

Providers renting or leasing their space interested in upgrading their HVAC systems should inquire about installing a minisplit system. Minisplit systems can cool or heat spaces. They are ductless, easy to install, and energy efficient.

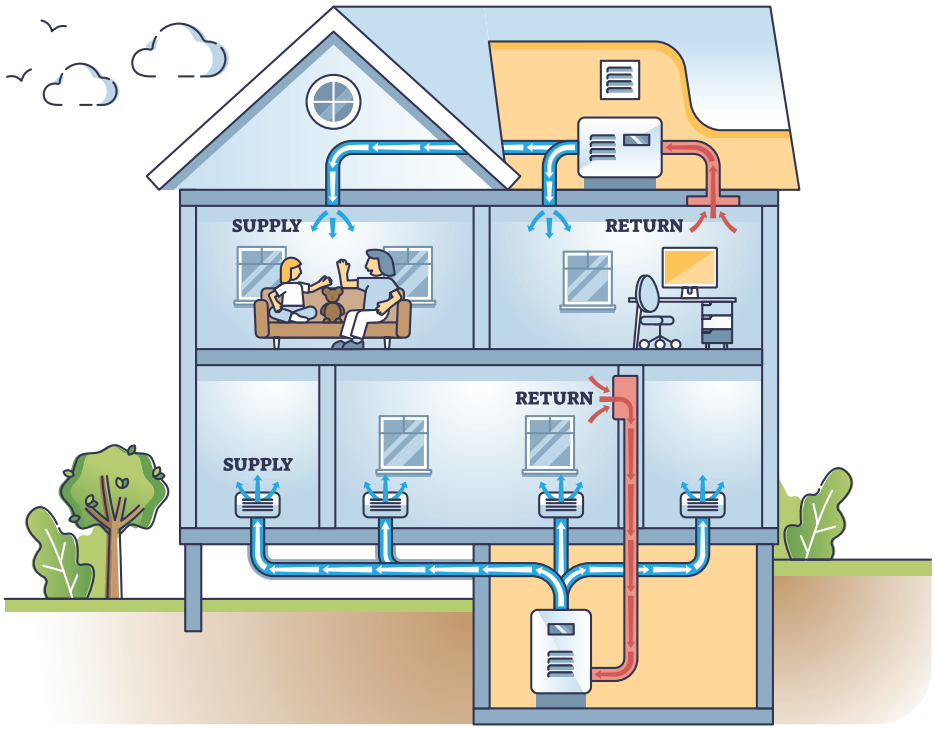


Figure 3A
Thermal comfort and control indoor air quality

FF&E AND MATERIALS	UNIVERSAL SOLUTIONS	SPECIFIC SOLUTIONS
Building System Improvement strategies Small, cost-efficient improvements to building systems can have major impacts on the comfort and safety of a building's indoor environment.	**Replace mechanical systems appliances and equipment filters**	Install high efficiency HVAC filters
	Install portable air cleaning devices	Install HEPA filters
	Install egress and emergency lighting	Install high efficiency lighting systems
	Safeguard water distribution systems	Insulate exposed pipes, install heat tracing and interior shut off valves

Before each winter season, furnace systems and vents should be checked by a qualified expert or certified installer.

MAINTENANCE ACTIVITIES

Regularly inspect, secure, and/or clean the building's systems:

- ☐ HVAC condensate pans for proper drainage
- ☐ Thermostat batteries
- ☐ Refrigerator condenser coils
- ☐ Heating and air conditioning supply or return air grilles are unblocked
- ☐ Dryer traps, vent pipes, and exhaust fans
- ☐ MEP equipment like plumbing fixtures for cracks or leaks
- ☐ Fire protection systems devices and equipment are tested regularly and functioning properly

RELEVANT RESOURCES

- LISC's Maintaining Your Child Care Facility Guide
- LISC's Child Care Physical Environment Checklist
- LISC's Family Child Care Checklist

BEST PRACTICES: MIXED-MODE VENTILATION SYSTEMS

If it's feasible given location, outdoor air quality, and/or security issues, creating or installing **mixed-mode ventilation systems** is a proactive approach child care providers can take in advance to effectively respond to emergencies, minimize damage, and streamline recovery. Mixed-mode ventilation systems save providers money and help children and staff feel more connected to the outdoors. These hybrid systems rely on natural ventilation or operable windows, mechanical cooling or air conditioning, and electrically powered equipment like ceiling fans. Together these systems effectively remove heat and prevent unnecessary cooling. In the event of a power failure, mixed-mode systems can help maintain a safe and healthy indoor environment.

PREPAREDNESS PROFESSIONALS

Seeking more information about a home or center's HVAC system and equipment?	Consult a **licensed MEP engineer** and/or a **certified HVAC technician**
Interested in upgrading fire protection systems?	Consult a **licensed architect** and/or a **licensed MEP/FP engineer**
Interested in testing and/or upgrading critical utilities equipment to meet code and load requirements?	Consult a **licensed MEP engineer** *and* a **licensed electrician**
Interested in installing egress and emergency lighting?	Consult a **licensed architect**
Interested in safeguarding water distribution systems?	Consult a **licensed MEP engineer**

Indoor Space

The indoor environments of early learning and child care spaces should be purposefully arranged for ease of use and cleanliness while also feeling warm and home-like. A few key components of quality caregiving spaces include safety, comfort, convenience, flexibility, approachability, and sufficient **storage,** which is too often an afterthought.

All programs should have the current layout of their indoor spaces accurately depicted in an easily accessible egress and emergency floor plan. Here are sample floor plans for home-based providers and center-based providers.

FF&E AND MATERIALS	UNIVERSAL SOLUTIONS	SPECIFIC SOLUTIONS
Indoor Space Improvement strategies Providers can assess how best to improve indoor spaces for emergency preparedness by conducting regular drills and incorporating feedback to identify potential hazards and best practices for space reconfiguration and safety maximization.	**Fortify best available refuge areas**	Secure space with impact-rated materials
	Establish an easily accessible, dedicated supply storage area	Secure space for safe storage of emergency supplies
	Upgrade flooring materials	Install flood-resistant flooring
	Upgrade appliances and equipment	Install high efficiency appliances
	Secure all indoor furniture, fixtures, and equipment	Install anchors, fasteners, or straps

An electrical failure may result in the loss of refrigerated food supplies; the Preparedness and Resiliency Cookbook was created to help caregivers and parents make food choices that are healthy, tasty, quick, and safe.

PREPAREDNESS SUPPLIES	UNIVERSAL SUPPLIES	SPECIFIC SUPPLIES
Indoor Space Supplies Most states regulate what licensed providers should include in their emergency preparedness kits. • Emergency Supply Kit and Kit de Suministros de Emergencia • Comfort Care Kit for Kids and Kit de cuidado reconfortante para niñosa • First Aid Kits • Cleaning Supply Kits	**Indoor air quality controls**	Duct tape, plastic sheeting, and masks
	Lighting controls	Headlamps or lanterns
	Thermal comfort controls	Battery powered portable fan or blankets
	Food, water, and medicine management	Storage bins, large cooler, and manual can opener
	Devices and equipment management	Batteries and/or portable power station
	Communication and alert management	NOAA-equipped weather radio
	Damage and injury prevention	Durable shovel and salt/deicer Sandbags or reusable flood bags Battery powered fire alarm and carbon monoxide detector

Landlord-tenant rights vary by state. Providers renting or leasing their space interested in purchasing and using portable devices should check with local and state agencies to better understand tenants' rights and ensure compliance.

MAINTENANCE ACTIVITIES

Regularly inspect, secure, and/or clean the indoor spaces:

- ☐ Pathways are clearly defined, allowing children, families, and visitors to easily move through the space
- ☐ Telephones or intercoms are located in each classroom and work properly
- ☐ Light fixtures are functioning properly
- ☐ Appliances are functioning properly
- ☐ Fixtures, furniture and equipment are in good condition without peeling paint or loose parts
- ☐ Fixtures, furniture and equipment are sturdy and secured to walls or floors if needed

RELEVANT RESOURCES

- LISC's Maintaining Your Child Care Facility Guide
- LISC's Child Care Center Equipment and Furnishing
- LISC's Equipo y Mobiliario del Centro de Cuidado Infantil
- LISC's Child Care Physical Environment Checklist
- LISC's Family Child Care Checklist

BEST PRACTICES: BEST AVAILABLE REFUGE AREA

Identifying and fortifying the **best available refuge area** within a building is a proactive approach child care providers can take in advance to effectively respond to emergencies, minimize damage, and streamline recovery. Best available refuge areas provide higher levels of protection for caregivers and children during severe weather conditions. Best available refuge areas can be in a building's basement or interior hallway. The area should be small and ideally have no windows. These spaces should be accessible to all occupants, free of clutter, and equipped with emergency supplies. Providers can utilize FEMA's Best Available Refuge Area Checklist and should consult local fire department officials to objectively determine the space(s) that will perform best under severe weather conditions and during natural disasters.

Outdoor Space

Access to nature and outdoor play space is fundamental to child development. Outdoor play spaces are widely considered an extension of the classroom and should be designed to support a range of activities utilizing the natural environment. Overlooked or poorly maintained outdoor spaces and equipment can amplify property damage or personal inquiry in severe weather and natural disasters.

Providers renting, leasing, or sharing their outdoor space should work with landlords or neighbors to establish a clear understanding of what outdoor space components the landlord or neighbor is responsible for versus what the provider is responsible for in terms of general maintenance and emergency preparedness.

FF&E AND MATERIALS	UNIVERSAL SOLUTIONS	SPECIFIC SOLUTIONS
Outdoor Space Improvement strategies Providers can assess how best to improve outdoor spaces for emergency preparedness by conducting regular drills and incorporating feedback to identify potential hazards and best practices for space enhancement and safety maximization.	**Upgrade playground equipment and surfacing**	Replace heat absorbent materials
	Install permanent secured shade structures	Install awnings or canopies
	Install new and/ or enhance existing landscaping	Remove gravel and rock materials Install rain garden or stormwater planters
	Secure outdoor equipment (i.e., fuel tanks, utility links, fencing, gates, railings, storage, and/or sheds)	Install anchors, fasteners, or straps

Providers noticing tree limbs close to utility lines and poles should contact their local utility company who will dispatch tree trimming services free of charge.

MAINTENANCE ACTIVITIES

Regularly inspect, secure, and/or clean outdoor spaces:

- ☐ All areas are free of trash and debris
- ☐ Playground equipment and surfacing are in good condition
- ☐ Stairs, sidewalks, and/or walkways are in good condition
- ☐ Fencing, gates, and/or railings are in good condition
- ☐ Storage and/or sheds are in good condition
- ☐ Outdoor utility equipment like fuel tanks and/or utility links are in good condition
- ☐ Drains are free of debris
- ☐ Loose items and equipment are secured ahead of expected severe weather

RELEVANT RESOURCES

- LISC's Maintaining Your Child Care Facility Guide
- LISC's Child Care Center Playgrounds Guide
- LISC's Parque Infantil en Guarderías
- LISC's Playground Safety Inspections Guide
- LISC's Routine Playground Inspection Checklist

BEST PRACTICES: LANDSCAPING

Landscaping is a proactive approach child care providers can take in advance to effectively respond to emergencies, minimize damage, and streamline recovery. Landscaping is an extremely effective tool to mitigate severe weather and natural disasters. Incorporating diverse plant types into outdoor spaces enhances a program's curb appeal and improves resiliency.

Providers in areas prone to **severe wind events** should consider removing gravel and rock landscaping materials that can cause damage or injury.

Providers in areas prone to **flooding** may want to explore effective flood-resistant solutions like rain gardens that naturally capture and absorb rainwater runoff.

Providers in areas prone to **extreme heat** and **extended daylight hours** should consider planting woody trees and shrubs that will provide additional shading and cooling effects.

Providers in areas prone to **wildfires** should relocate existing vegetation and ensure the immediate area around a home or center is free of all vegetation and any other combustible or flammable groundcovers.

Providers interested in optimizing their outdoor spaces should consult a **licensed landscape architect**.

SECTION

4 Strategic Recommendations

As severe weather events and natural disasters increase nationwide, so does the strain on our child care system. Investing in child care infrastructure is essential for emergency preparedness. A sustained commitment to infrastructure funding and technical support boosts provider preparedness helping them effectively respond to emergencies, minimize damage, and streamline recovery. Based on our expertise, research, and findings, we offer the following recommendations to meet the needs of and support next steps in child care provider preparedness:

Policymakers and Funders

- ☐ **Expand eligible funding sources:** Support eligibility and application of Child Care and Development Fund (CCDF) quality dollars and other funds to emergency preparedness measures for recognized child care providers, including home-based care providers.
- ☐ **Include HBCC providers in Facility Funds:** Ensure eligibility and inclusion of HBCC providers and renters in facility funds. Allow funds to address preparedness improvements and deferred maintenance needs. Colorado's Family Child Care Home Facilities Improvement Grant is a worthy model.
- ☐ **Establish new funding sources and incentives:** Create grant programs dedicated to supporting routine maintenance and repairs associated with preparedness with clear eligibility criteria and simple application processes. The funds should be constructed for quick access to ensure the continuous operation of child care services. Additional financial incentives for property maintenance will ensure long-term sustainability.
- ☐ **Preserve benefit protections in federal policy:** Provisions in the Stafford Act and Internal Revenue Code 139, detailed in the IRS Charitable Disaster Relief Guidance, protect recipients of qualified disaster relief payments from benefits disruption and ensure that such payments are tax exempt. The activation of these provisions relies on Presidential disaster declarations; we must maintain thresholds for these declarations and ensure they are called in all applicable disasters.

Local Governments and Community Organizations

- ☐ **Conduct advocacy and outreach** to promote HBCC provider awareness of and access to existing financial assistance programs to support preparedness measures.
- ☐ **Support HBCC provider implementation of preparedness measures:** This includes:
  - Creating a centralized, publicized, accessible, and user-friendly **information hub** where providers can find comprehensive information on available supports
  - Developing accessible **procurement guidance** and establishing a **coordinated referral network of vetted licensed professional and qualified experts** for preparedness improvements
  - Providing **licensing guidance** on approval processes for preparedness upgrades
  - **Simplifying** and **expediting zoning processes** to reduce delays and accommodate the unique needs of child care providers

- Helping providers navigate **insurance** and **legal considerations** when making facility improvements
- **Promoting** and **expanding tenants' rights** to help providers navigate relationships with landlords and homeowner associations

Child Care Providers

- ☐ **Begin where you are:** Use this guide to identify preparedness measures that fit your geographic risks and resources.
- ☐ **Seek available funding and support:** Research state and local financial assistance programs for homeowners and family child cares that you may qualify for. Contact your Child Care Resource & Referral agency (CCR&R) or licensing office for information on facility improvement and preparedness opportunities.
- ☐ **Review your rights (and responsibilities):** If you rent your space, review your lease and consult your landlord before making structural changes.

RELEVANT RESOURCES

- Home Grown's Child Care Insurance Is Expensive, Hard To Find, And Complex: One More Burden For Home-Based Providers
- LISC's Preparing your Child Care Business for Tax Season
- Civitas Strategies' Preparing for Tax Season: A Guide for Home-Based Child Care Providers

SECTION

5 Resources, Appendix, and Acknowledgments

Home Grown is focused on delivering cash aid to disaster impacted communities of home-based child care providers across the country in partnership with local organizations and networks. As a part of this work, we share the experiences of providers and caregivers and capture learning from these communities in our own products and in partnership with the press.

- Responding To Crisis: Cash Aid In Times Of Disaster
- Navigating Grief Around Hurricane Helene And Hopes For The New Year
- Partnering For Resilience: Child Care Support Amid LA's Flames
- Up In Flames: It's A Long, Hard Road To Recovery For Altadena Family Child Care Providers
- Where The Climate Crisis Meets Child Care: HBCC Provider Experiences Amid Natural Disasters
- The 74: Months After Los Angeles Wildfires, Child Care Providers Are Still in Crisis
- Daily Yonder: Disaster on Top of a Disaster: Can Western North Carolina's Child Care Infrastructure Recover After Helene?

To complement our training and technical assistance activities around financing and facilities, LISC Child Care & Early Learning has developed a series of guides to help providers, stakeholders, and communities navigate the complexities of building high-quality early learning environments. Discover the resources listed here and more in our Child Care Resource Library.

- Child Care Center Facilities Development & Financing Guide
- Child Care Center Equipment and Furnishing Guide
- Child Care Physical Environment Checklist
- LISC's Equipo y Mobiliario del Centro de Cuidado Infantil
- Child Care Center Playgrounds Guide
- LISC's Parque Infantil en Guarderías
- Facility Self-Assessment Tool
- Family Child Care Checklist
- Greening Early Childhood Centers Guide
- Reverdeciendo los Centros de Primera Infancia
- Maintaining Your Child Care Facility Guide
- Making Space Matter
- Preparing your Child Care Business for Tax Season
- Raising the Roof Webinar
- Routine Playground Inspection Checklist
- Securing an Architect Guide
- Securing a Contractor Guide

Emergency Preparedness Resources

- **American Red Cross: Emergency Resource Library** includes fact sheets, preparedness checklists, recovery guides, and other helpful information to keep providers and parents informed and safe
- The **Centers for Disease Control and Prevention (CDC)** offers a variety of emergency preparedness and response resources including Coping with a Disaster or Traumatic Event information to assist families in understanding and coping with traumatic events and Guidelines for Cleaning Safely After a Disaster
- **Child Care Aware® of America** delivers extensive emergency preparedness tools, publications, resources and up-to-date information:
  - Reducing the Financial Toll of Emergencies
  - Reducir el impacto financiero de las emergencias
  - How Insurance Protects You in an Emergency
  - Cómo lo Protege el Seguro en Caso de Emergencia
  - Emergency Supply Kit
  - Kit de Suministros de Emergencia
  - Creating a Comfort Care Kit for Kids
  - Crear un kit de cuidado reconfortante para niñosa
- **Federal Alliance for Safe Homes (FLASH)** provides customized retrofits and upgrades recommendations for homes to withstand and recover from disasters
- **Federal Emergency Management Agency (FEMA)**, Protect Your Property Brochures including Document and Insure Your Property help homeowners and renters prepare for and reduce damage caused by natural hazard events
- **HeadStart** resources help early childhood programs learn more about emergency preparedness:
  - Emergency Preparedness Manual for Early Childhood Programs
  - Emergency Preparedness Resources
  - Emergency Recovery and Response Resources
  - Health and Safety Recovery Checklist
  - Mental Health and Emergencies
  - Natural Disasters and Head Start Facilities
  - Resilient Facilities
- **Insurance Institute for Business and Home Safety (IBHS) Home Disaster Guides** offer insights into home safety and disaster-related maintenance, preparation, upgrades and repairs
- **Just Solutions**, Know Your Rights: FEMA & Immigration provides guidance for immigrant families accessing FEMA
- The **National Low Income Housing Coalition**
  - Publishes an annual Advocates' Guide with information about programs and policies related to affordable housing in the United States. **Chapter 10 on Disaster Housing**

Recovery, Research, and Resilience (pages 585 - 614) discusses disaster preparedness, recovery, and resilience.

  - Offers a basic disaster fact sheet that contains disaster-related information and links from FEMA, U.S. Department of Housing and Urban Development (HUD), Small Business Administration (SBA), U.S. Department of Agriculture, Rural Development (USDA), Government Sponsored Enterprises (GSEs), and Internal Revenue Service (IRS)

- **Partnership for Inclusive Disaster Strategies (PIDS)** operates the Disability & Disaster Hotline which provides information, referrals, guidance, technical assistance, and resources to people with disabilities, families, allies, and organizations assisting disabled disaster survivors and others seeking assistance with immediate and urgent disaster-related needs
- **Protecting Immigrant Families (PIF) Coalition**, Disaster Recovery Guide helps immigrant families navigate access to disaster response and recovery programs and is available in nine languages
- **Save the Children**
  - Emergency Preparedness & Recovery Resources for Child Care includes an overview of trainings, toolkits, and psychosocial support programs available to help children and caregivers
  - How to Help Caregivers Cope with Stressors provides ten tips to support caregivers
  - One-pager on Individual vs Public Assistance through FEMA
  - Ten tips for helping children cope with disaster, in English and Spanish
- **U.S. Environmental Protection Agency (EPA)**
  - Guide to Creating a Clean Room to Protect Indoor Air Quality During a Wildfire
  - Guide to Air Cleaners in the Home
- **Zero to Three** links to a set of family-facing Natural Disaster Preparation Resources that providers could share with parents of young children

Financial Assistance Resources

Note that many of these government-run programs are only activated after there has been a presidential disaster declaration.

- **American Red Cross: Disasters and Financial Planning**
- **DisasterAssistance.gov**
- **Federal Emergency Management Agency (FEMA):**
  - Individual Assistance programs
  - Public Assistance programs
  - Hazard Mitigation Assistance (HMA) programs:
    - » Hazard Mitigation Grant Program (HMGP)
    - » Hazard Mitigation Grant Program Post Fire (HMGP Post Fire)
    - » Building Resilient Infrastructure and Communities (BRIC)
    - » Flood Mitigation Assistance (FMA)

  - State Hazard Mitigation Officers (SHMOs) can advise on what information must be provided for a project to be considered for funding, any applicable federal, state, and local design requirements and information on other funding sources
  - Safeguarding Tomorrow Revolving Loan Fund Program
  - Regional Catastrophic Preparedness Grant Program
  - Information on applying for individual assistance or public assistance following a presidentially-declared disaster (more information from the California Governor's Office of Emergency Services here)
- **HOPE Coalition America**, HOPE Inside Disaster is a financial emergency preparedness and recovery program designed for individuals and small business owners
- **Ready.gov**
- **U.S. Department of Agriculture**
  - Housing Preservation Grants
  - Rural Decentralized Water Systems Grant Program
  - Single Family Housing Repair Loans and Grants
  - Single Family Housing Rural Disaster Home Repair Grants
  - Disaster Supplemental Nutrition Assistance Program
- **U.S. Department of Energy**
  - Energy Infrastructure Reinvestment (EIR) Financing
  - Federal Financial Assistance Programs for Resilience Activities
- **U.S. Department of Housing and Urban Development (HUD)**
  - 203(k) Rehabilitation Mortgage Insurance Programs
  - Healthy Homes Grant Opportunities
  - Community Development Block Grant - Disaster Recovery Program (CDBG-DR) helps states and communities recover after a presidentially-declared disaster (more information from the National Low Income Housing Coalition here)
  - Rapid Unsheltered Survivors Housing (RUSH) program for states and local governments to assist people experiencing or at risk of homelessness after a presidentially-declared disaster (more information from the National Low Income Housing Coalition here)
- **U.S. Department of Labor**
  - Disaster Unemployment Assistance
- **U.S. Small Business Administration (SBA)**
  - Disaster Assistance
  - Disaster Recovery
  - Loans and Grants

State Specific Resources

● OPEN ○ CLOSED

●	**Alabama**	Strengthen Alabama Homes
●	**Arizona** (Phoenix)	Neighborhood Services' Housing Repairs and Rehabilitation Programs
○	**California**	Child Care and Development Infrastructure Grant Program
●	**California**	Earthquake Brace + Bolt (EBB) and the Earthquake Soft-Story (ESS) programs
●	**Colorado**	Early Childhood Council Leadership Alliance (ECCLA) Family Child Care Home Facilities Improvement Grant
●	**Florida**	My Safe Florida Home (MSFH) Program
○	**Louisiana**	Fortify Homes Program (LHFP)
○	**New York**	Child Care Stabilization Grants
●	**New Jersey**	NJEDA Child Care Facility Improvement Program Grant Phase 2 for Registered Family Child Care Providers
●	**Oklahoma**	SoonerSafe - Safe Room Rebate Program
●	**Pennsylvania** (Philadelphia)	PEA Built to Last program
●	**South Carolina**	Safe Home Mitigation Grant Program **for coastal property owners*
○	**Washington**	Early Learning Facilities (ELF) program 2025-2027 Expansion and Maintenance Competitive Grant

Tip: Search for "home hardening grants", "retrofit programs", or "disaster resilience funding" along with your state name to look for additional opportunities in your area. These programs may be administered by your state's emergency management agency, resiliency office, legislature, or insurance department. Eligibility rules vary so check program details carefully, but if you operate a family child care program in your primary residence, you may qualify for these homeowner assistance programs. Some states may also offer child care-specific facility improvement or infrastructure grants. Check with your local or state Child Care Resource & Referral (CCR&R) agency.

APPENDIX A:

Safe Generator Usage Fact Sheet

Investing in alternative or back-up power sources is an effective way providers can prepare for and protect programs from the consequences of power outages. Batteries, power banks, and generators are examples of alternative or back-up power sources. Generators are emergency equipment that produce electrical power. There are two types of generators: temporary, portable generators and permanently installed standby generators.

STEP 1: DETERMINE YOUR POWER NEEDS

Before buying a generator, you'll need to know how much back-up power is required to effectively operate your program and for how long.

For example, let's assume you want a generator to power one appliance, a small refrigerator. First, you'll need to know the running wattage (R) required to run the small refrigerator. This information should be available in the owner's manual, appliance label, or online.

1. Let's say the Running wattage (R) for a small refrigerator is 350 watts
   - » R = 350 watts
2. Multiply the Running wattage R by 3 to find the Starting wattage (S)
   - » (R x 3) = S
   - » 350 x 3 = 1050 watts
   - » S = 1050 watts
3. Add the Running wattage (R) and the Starting wattage (S) together to determine the Total wattage (T)
   - » (R + S) = T
   - » 350 + 1050 = 1400 watts
   - » T = 1400 watts

The total wattage required to run your small refrigerator is 1400 watts. The best practice is to use a generator that can handle your power needs while using no more than **90 percent** of its capacity, so to run this small refrigerator you'd need a generator that can provide at least 1600 watts. To effectively operate a child care program during a power outage you'll likely need access to several appliances, equipment, and/or devices.

Make a list of all the appliances, equipment, and/or devices that you'd want access to during a power outage and repeat the exercise. Add the Total wattages (T) together to determine the Grand total wattage (G) and multiply that number (G) by 1.1. This number (C) will give you a general idea of how much power you'll need a generator to produce using no more than 90 percent of its capacity.

Appliances, Equipment or Devices	Running watts (R) see: owner's manual	Starting watts (S) R x 3 = S	Total watts (T) R + S = T
Small Refrigerator	350	1050	1400
Microwave	1200	3600	4800
Personal Computer	1000	3000	4000
Window-Unit A.C.	1500	4500	6000
Outdoor Lighting	750	2250	3000
		Grand total watts (G) T1 + T2 + T3 + T4 + T5 = G	19200
		Power required at 90% Capacity (C) G x 1.1 = C	21120 watts

**These above listed power requirements are general examples and should not be used to calculate specific requirements*

The more appliances you want to use, the bigger generator you will need. The owner's manuals for most generators include examples of what kinds of appliances, equipment, and/or devices they can provide power for.

STEP 2: CONSULT A PROFESSIONAL

Consult a **professional engineer** or **licensed electrician** to confirm local building code requirements, calculate electoral load, evaluate options and fuel needs, install and/or connect equipment to the appropriate power supply, and identify or establish a place to store equipment including reserve fuel tanks.

STEP 3: CHOOSE A GENERATOR

Generators come in several different types and sizes.

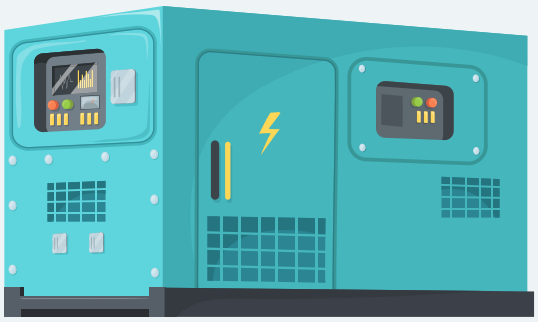
Portable Generators Powered by Batteries or **Solar Power Stations** are often less powerful than traditional gas-powered generators, but they do not generate toxic fumes and so can be used in indoor spaces, on balconies, or near doors, vents, and windows. If you decide to buy a generator that is battery powered, remember to check and charge the battery regularly as they can lose power over time.

Traditional gas-powered generators use propane, natural gas and diesel fuels.

Permanent gas-powered generators, also called stationary or standby generators, are permanently installed a minimum of 20 feet outside a center or home in a well-ventilated area. Permanent gas-powered generators can power an entire center or home. Permanent generators are more expensive to purchase and install.

Consult a **licensed electrician** to assist in the selection and installation of the correct equipment that meets local electrical codes or ask your utility company to install an appropriate power transfer switch.

Permanent generators are installed near the incoming gas service or near the main electrical panel and securely mounted to a concrete pad in a flat, level area. There should be no plants, shrubs, lawn furniture, or any other ignitable materials near the generator exhaust.

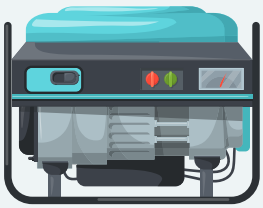


POWERS

- whole house

Portable gas-powered generators should only be used temporarily when needed for essential equipment. Portable generators are not designed for permanent installation and should be operated outside in a well-ventilated area. Portable gas-powered generators are more affordable but generate less power than permanently installed standby generators. Portable generators should only be used to power essential equipment.

Before you operate your portable generator, you'll need to disconnect the regular source of power to your home or center. If used improperly, portable gas-powered generators can overload, overheat, and catch fire. Consult a **licensed electrician** to assist in the selection and installation of the correct equipment that meets local electrical codes or ask your utility company to install an appropriate power transfer switch.



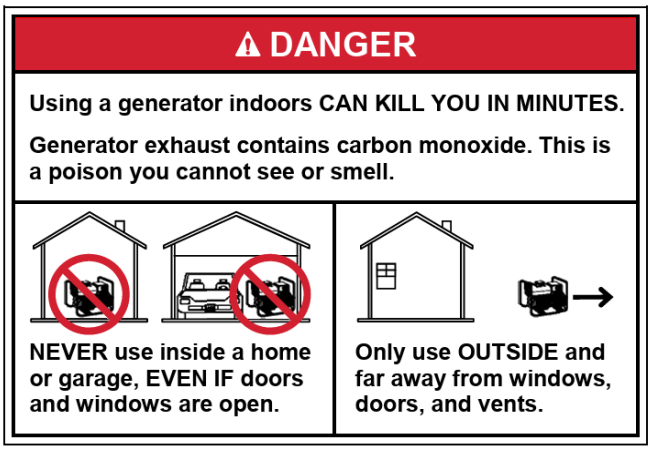
POWERS

- chest freezers
- lights
- fans
- Wi-Fi
- fridges
- window ACs
- garage doors
- TVs

Appliances should be connected to a portable generator with an extension cord. Extension cords should be heavy duty, outdoor rated to power the total watts or electrical loads of the connected appliances, and free of cuts or tears. Portable generators should *never* be plugged directly into wall outlets. Plugging generators directly into a wall outlet will compromise a center or home's electrical system and put you, the children in your care, your neighbors, and utility workers at risk of electrocution.

The **primary hazards** to avoid when using gas-powered generators are **carbon monoxide poisoning** from the toxic engine exhaust, **electrocution**, and/or **fire**. If you decide to buy a traditional gas-powered generator, **install electric carbon monoxide detectors** with **battery backups** on each floor of your home or center.

Gas-powered generators require **reserve fuel** which will need to be safely stored. Local laws may restrict the amount of fuel you may store storage tanks and/or location. Consult your **local fire department** for more information about generator installation, use, and fuel storage.



STEP 4: SAFE GENERATOR USAGE

Inspect and maintain your generator regularly.

- Always follow the manufacturer's instructions *carefully*.
- Inspect and maintain your generator regularly; some generators come with a maintenance contract and/or annual service visits.
- Keep portable generators outside and at least 20 feet away from open windows.
- Never place a portable generator in a garage.
- Only use the type of fuel recommended in the instructions on the label.
- Keep fresh fuel in the tank and periodically run the generator to ensure that it is working properly.
- Be sure to turn the generator off and let it cool down before refueling.
- Store fuel for your generator in an approved safety container.
- Store fuel for your generator in a cool, dry, well-ventilated place outside.
- Keep the generator dry to avoid electrocution.
- Regularly monitor above-ground storage tanks and generator equipment for cracks or leaks and make repairs immediately.

SAFE GENERATOR USE RESOURCES

- American Red Cross: Safe Generator Use
- Federal Alliance for Safe Homes: Plan for Power Outages and Safe Generator Use
- Home Depot: Choosing the Right Size Generator
- This Old House: Simple Guide for Selecting a Home Generator

Acknowledgements

The research and analysis presented in this paper is attributed to a team of individuals and entities committed to lifting up the critical needs of child care providers in building and sustaining high quality early care and learning environments.

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Home Grown
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Emily Franchett, Consultant, Home-Based Child Care Emergency Fund for Severe Weather & National Disaster Response
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LISC National Child Care & Early Learning
Bevin Parker-Cerkez, LISC National Child Care & Early Learning
Megan Ressler, LISC National Child Care & Early Learning
Regina Phillips, LISC National Child Care & Early Learning
Brandi Roberts, LISC National Child Care & Early Learning
Maggie-Leigh O'Neill, Policy and Research Consultant

Additional thanks to the following individuals and organizations for their time and talent:

Matthew J. Lucciola, AIA, LEED AP
Meghan Mertyris, Disaster Housing Recovery Coalition, National Low Income Housing Coalition
Michael Santora, Crown Architecture and Consulting, D.P.C.