

## EMC Annual Report 2022

Kansas City must act to meet the significant climate change challenges upon us. Climate impacts to the metropolitan area will be considerable with increasing heat and flooding, decreasing air and water quality and overall decline in ecosystems (NOAA, 2020; Anderson and Walke, 2015). Additionally, these challenges disproportionately impact our most vulnerable populations (Islam and Winkel, 2017). The climate crisis is a public health emergency as the impacts have direct and long-term impact on public health of our vulnerable communities. However, as a community, Kansas City is uniquely positioned to actively address these challenges transforming the health, well-being, environment, and economy resilience of the city.

The newly drafted Climate Protection and Resiliency Plan (CPRP) and the Declaration of a Climate Emergency late last year (Resolutions 200005 and 210967, respectively) have been significant actions by our civic leaders pushing in the right direction for climate action and justice. The rapid and escalating degree of the climate crisis necessitates aggressive and continuous focus on transitioning our community resulting in reciprocal benefits for our citizens.

Ultimately, adapting to climate change is an issue of equity, specifically racial equity. As the city adjusts to and works to mitigate the worst impacts of a climate changed world, we are presented with a rare opportunity to create massive amounts of wealth more equitably distributed. It is important to understand and stress more equitable infrastructure and deep connection to the natural world benefits the entire community.

From electrification of our transportation and energy systems; the work to move away from extractive, single-use materials; the creation of a pipeline of skilled green-collar workers from an array of backgrounds, and local food production, we have ample opportunity for citizens all across Kansas City to reap an economic windfall by being a part of what the city has already committed to do.

This report is a brief breakdown of a matrix of top issues, organizations, needs, and solutions (Table 1) to face a world already eclipsing a CO<sub>2</sub> concentration exceeding 420 parts per million and 2 degrees Fahrenheit warmer than 100 years ago. The report is organized by key issues and focuses on the equity and justice needs of each along with potential solutions and major local partners to advance this work. The work of climate transition is already taking in place in various places and in various sectors, the city would do well to access the expertise and existing partnerships to strength and expand their own efforts. A major new development is the announcement on June 16<sup>th</sup> that Kansas City was officially named a **FIFA World Cup** 2026 host city. The preparations for this major world sporting event requires significant development and commitment. Kansas City will also host in the **NFL Draft** event in April 2023. This sporting event will be the largest event to date to come to Kansas City bringing thousands of people to Kansas City. Kansas City must make sure these events and associated investments align strongly with the KC Climate Protection and Resiliency Plan and propel us further to a just transition.

Table 1. Kansas City Just Transition Needs, Solutions and Partners.

Issue	Equity	Solutions	Partners
Mobility	<ul style="list-style-type: none"> <li>• CO2 heavy transportation system</li> <li>• Lack of equitable options for transport</li> </ul>	<ul style="list-style-type: none"> <li>• Cleaner individual and commercial goods transport</li> <li>• Sustainable public and individual transit options</li> </ul>	<ul style="list-style-type: none"> <li>• KCATA</li> <li>• BikeWalkKC</li> <li>• MARC</li> <li>• FIFA organizing committee</li> </ul>
Homes and Buildings	<ul style="list-style-type: none"> <li>• Inequitable and unsafe housing</li> <li>• More energy efficient housing needed</li> </ul>	<ul style="list-style-type: none"> <li>• A denser, more connected Kansas City</li> <li>• Tighter building energy efficiency codes</li> <li>• Commercial and residential solar initiatives</li> <li>• Retrofitting for energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• KC Housing Authority</li> <li>• KC Tenants</li> <li>• Climate Action KC</li> <li>• Development community</li> </ul>
Circular Economy	<ul style="list-style-type: none"> <li>• Unsustainable consumption</li> <li>• More regenerative practices for goods and services</li> <li>• Local food production</li> <li>• Soil regeneration</li> </ul>	<ul style="list-style-type: none"> <li>• Decreasing energy inputs for consumer goods</li> <li>• Increasing sustainable practices for reuse</li> <li>• Affordable services for underserved community</li> </ul>	<ul style="list-style-type: none"> <li>• Bridging the Gap</li> <li>• Cultivate KC, KC Farm School</li> <li>• Composting collective</li> </ul>
Communication	<ul style="list-style-type: none"> <li>• Dissemination of concepts and opportunities</li> <li>• Attention to digital divide</li> </ul>	<ul style="list-style-type: none"> <li>• Ideas to facilitate inclusion across the city</li> </ul>	<ul style="list-style-type: none"> <li>• City Communications</li> <li>• KC Libraries</li> <li>• Neighborhood community centers</li> </ul>

**Mobility**

Between 1950 and 2020 Kansas City's developed area has quadrupled while the population has remained roughly the same due to a planning emphasis around the individual automobile as the dominant mode of transportation. Transportation accounts for almost 35% of all greenhouse gas (GHG) emissions in the KC metro. Reducing carbon-based, individual transportation will contribute significantly to achieving net-zero emissions. Additionally, Kansas City's automobile-biased transportation disadvantages our low-and-moderate income communities who cannot afford reliable cars. Further exacerbating automobile bias, is the public transportation system which is strongly oriented north-south and less east-west routes which are most needed. The Commission recommends Kansas City continue making investments and adjusting our infrastructure to reflect the changes needed to reduce reliance on the carbon-intensive practice of internal combustion engine-based travel.

- The [Bike KC Master Plan](#) increases efficient east-west mobility, addressed the last mile challenge of getting people from public transportation to their homes, and expanding EV infrastructure.
- Kansas City is extending the streetcar from Union Station south to University of Missouri of Kansas City. While extending the range of the streetcar is an important step, it is not currently designed for transporting large numbers of commuters.

### *Equity*

- KC's decision to make our public transit free is a significant win for race equity in our city.
  - [Zero Fare Analysis](#)
  - This said, public transit is ~~still often~~ not as convenient as personal vehicles because of Kansas City's automobile-centric design of the 1950s. This system is less friendly to those in Low-to-Moderate Income (LMI communities and those who are differently abled.
  - Innovative patterns of infill development could offer opportunities for more efficient transit in mature neighborhoods

### *Solutions*

- It is strongly recommended to adopt the Mobility strategies from the CPRP, particularly a safe and accessible bike plan (M2) integrated within an overall transit plan (M3) that allows residents and workers to move efficiently around the city for work, necessities, and leisure.
- Intentionally co-locate grocery shopping, child care, community and financial services, and public rest rooms near stops along primary transit corridors.
- Expand EV infrastructure to all areas of the city
- Increase fees for parking downtown, and limit free parking spaces associated with housing on transit routes where one-car households can be an attractive option.
- Prioritizing transit vehicles where possible at intersections, etc. would indict our priorities.
- Routinely offer special event transit options

- park and ride, could be fee based –works better when it is predictable – i.e. transportation to scheduled sporting events, or advertised with the event promotions i.e. Boulevardia
- Expand and support shared mobility, and suburban park and ride services
- Develop Smart City shared mobility apps
- Intensive support for technical training

*Partners*

- Partners in moving the dial on next generation mobility are the KCATA, BikeWalkKC, and MARC. A potential new partner could be the group organizing bringing FIFA to Kansas City. In four short years Kansas City will be hosting World Cup soccer and flooded with European and world-wide soccer fans. Our mobility infrastructure is woefully behind Europe and Kansas City needs to address moving thousands of soccer fans around the city efficiently. This is a wonderful opportunity to make these improvements as carbon free and sustainable as possible.

**SOLUTION SPOTLIGHT:**

**New KC LED streetlight program-** Kansas City is upgrading its streetlights for the first time in decades, installing 84,000 LEDs.

**Kansas City Free Busing-** Kansas City is the largest US city to commit to a fare-free bus system This is a tremendous step to alleviating the costs of transportation for our most vulnerable workers who rely on public transportation to get to and from work and errands.

**KCATA-** KCATA’s electric bus fleet; RideKC free Flex service that brings small bus to resident and the new app for the service.

**Homes and Buildings**

Nationally commercial and residential comprise 30% of GHG emissions (EPA 2019). In Kansas City, even more than transportation, homes, commercial, and industrial building energy consumption accounts for 63.5% of total GHG emissions. Therefore, the built environment in our city is a critical piece of reducing our climate footprint, as well as creating more livable and prosperous neighborhoods.

*Equity*

- Much of our housing stock is older or in need of repair and energy efficient retrofitting, especially those located in low- and moderate-income communities and those with more BIPOC residents. The average age of housing stock in Kansas and Missouri is 46-53 and 41-25, respectively (American Community Survey). This contributes to energy inefficiency and housing quality.
  - [Racial wealth gap](#) (home values)

- Kansas City has a very high 46% rental and 53% owner occupied properties. This is well below the Midwest average of 70% owner occupied housing (US Census, 2022).
- Barriers to home ownership in low- and moderate-income communities also contribute to distressed and energy inefficient housing. Barriers including lack of down payments, credit, and affordability.

### *Solutions*

- Increasing the energy efficiency of homes, commercial, and industrial buildings, as well as public buildings (B-1.1 thru B-1.6)
- Adopt the new 2021 building codes, and consider regional codes in 2024
- Create an RFPs for high performance firms to create net-zero community resource and resiliency hubs in every district of the city; then retain those firms to act as educators and advisors for high performance workforce development (strategies B-3.5, B-3.4, and B3.2, respectively, p. 40 of the CPRP)
- Use the Department of Energy’s Home Energy Score and Building Energy Asset Score and requiring it be communicated prominently in the advertising of any real estate transaction (strategy B-2.4, p. 39 of the CPRP) and rental information
- Investing in passive homes and, eventually, passive neighborhoods (B.3.4)
- Address homes in more terms than just monetary value, include age, energy efficiency, efficiency of services (school district, sidewalks, distance to public transport)
- Partner with area developers to engage and move climate resilience to action in the professional community.
- Expand benchmarking beyond energy to water and waste
- Clearly prescribed financial incentives
- Community Climate Captains- Having dedicated – and stipend funded – residents who can serve as immediate touchpoints for climate related emergencies like floods, storms, or heat-caused power outages. These community leaders could also act as key conveners of climate related programming, education, and moving towards net-zero community resiliency hubs (B-3.5 in CPRP).
- Incentivizing avenues for access to finances and credit for such as CDFIs

### *Partners*

- KC Housing Authority
- KC Tenants
- Climate Action KC
- Westside Housing
- Jerusalem Farm
- Trust Neighborhoods
- The Builder’s Assoc.
- The Home Builders Association of Greater Kansas City

### **SOLUTION SPOTLIGHT:**

**Lichens Neighborhoods Trust** - A successful case study in protecting intergenerational affordability, community asset control, and community stability.

**Marlborough Community Land Trust-**

## **Circular Economy (Food and Waste)**

Currently most American systems are linear: extraction, manufacture, use, to waste. In a [circular economy](#), the things we use and need to live and live comfortably should produce as little waste as possible. What waste *is* produced should, in turn, be used as an input for more production – think putting vegetable scraps in compost to make more soil to grow food in, but on a systemic scale. Food waste in the U.S. is an unbelievable 30-40 percent, a 200% increase in disposed food over the last 24 years (EPA). Despite the amount of food being wasted, food insecurity in the United States is 10.5%. Food insecurity in Missouri and Kansas are higher than the national rates at 13.2% and 12.1%, respectively. In the 26 counties served by Harvesters, 12.4% are food insecure, and the rates are even higher for children in this area at 16%.

### *Equity*

- Too many families in our region are food insecure while America clearly has a food surplus; coupling this with rising costs of living across the board the downward pressure on working in Kansas Citians is severe. In 2022, food price in Kansas City are the biggest single year increase in 14 years.
- Solid waste too often is illegally dumped in our communities, especially in LMI neighborhoods. Illegal dumping is hazardous, contaminates the environment, and depresses home values.
- Move towards a circular economy to create regional green jobs while simultaneously decarbonizing industrial sectors, such as aluminum, cement, and steel (through a Materials Recovery Facility [MRF] and waste building materials reuse/recycling, for example).

### *Solutions*

- Reinvest energy efficiency savings into further initiatives
- Fully fund the Urban Forest Master Plan (strategy N-4.1, p. 36 of the CPRP)
- Continue to incentivize the production of locally grown food and increase scale
- Facilitate rotating local fresh food markets in food deserts
- Address codes that prohibit lawn alternatives, incentivize planting natives and lawn removal
- Continue investing in a circular system of waste reduction, recovery, and composting.

- Close the gap between food waste and food insecure
- Address city codes blocking residential food production and composting, and municipal scale composting
- Increase participation in recycling programs and increase opportunities for community solid waste disposal, composting, and recycling (W-1.4 and W-1.6)
- Through city policies, procedures, and codes, strive to incentivize using recycled materials (aluminum, cement, and steel in particular) for new construction.
- Explore opportunities to establish an MRF for the KC Metro region.
- Utilize empty lots for urban agriculture, community orchards, and neighborhood composting
- Increasing leaf composting city wide
- Develop the Department Parks, Recreation, and Agriculture
- Work regionally to support the Heartland Conservation Alliances banner campaign to restore the Blue River (strategy N-2.1, p. 35 of the CPRP)

#### *Partners*

- After the Harvest
- Antioch Urban Growers
- Black Urban Growers
- Bridging the Gap
- Citty Bitty
- Composting Collective
- Cultivate KC
- Giving Grove
- Heartland All Species Project
- Heartland Tree Alliance
- KC Can Compost
- Kansas City Community Gardens
- KC Farm School
- MO Hives KC
- Sankara Farms
- Urban Station
- Urbavore Urban Farm
- Young Farmers Coalition KC
- Young Family Farm

#### **SOLUTION SPOTLIGHT:**

**Community Soil Science Cooperative-** researching soils and Johnson-Su composting initiative.

**Heartland Tree Alliance-** implementing the Urban Forest Master Plan city wide through tree planting program to increase urban canopy, reduce heat island impacts, and maintain biodiversity and ecosystem health.

## Communication

Communication in many respects is the most important component for attaining community buy-in for the transition that must be made. The degree of buy-in will determine to some extent how quickly these changes will happen, and in the case of the climate crisis the global community is already behind.

### *Equity*

- Need to disseminate climate crisis concepts and opportunities
- Need for consistent engagement and communication of practical and affordable adaptations
- Outreach and engagement with all neighborhood associations
- Address communicating with respect to the digital divide
- More simple, real-time, activity-specific communication
- Timely notice to those in direct proximity to public projects, clear explanations of how-to utilize services
- Promoting environmentally preferable behaviors

### *Solutions*

- Provide capacity building for resilient neighborhoods
- Communicate clear vision and plans for every initiative
- Develop public service announcements focused on climate facts and opportunities
- Support climate podcasts such as *American Green, Flatland*
- Community Climate Captains
- Develop climate and resilience curriculum for all Kansas City Public Schools
- Develop paid internships for environmental communication

### *Partners*

- Office of Environmental Quality
- Center for Neighborhoods
- KC Can Compost
- Kansas City Public Schools
- Kansas City Public Libraries

#### **SOLUTION SPOTLIGHT:**

**UMKC Center for Neighborhoods-** has trained 10 cohorts of neighborhood leaders and over 160 neighborhoods

**Codes communications (need the name)-**

## Call to Action



This report is designed to reflect and reinforce the diligent work of our city staff and community members to create a climate protection and resiliency plan. Moreover, the Environmental Management Commission (EMC) submits this to highlight systems-change solutions for the systemic challenge of climate change and to improve the lives and equity of our citizens.

We ask that you move from awareness to the will to act. Declaring a climate emergency raises the issue to our community, but now what will you do to address that emergency? Much like the abundance of this world, there is a similar abundance of solutions from which to choose, and will unit citizens in common action.

We advise that you start with some of the ideas highlighted in the report and also review the Climate Protection and Resiliency Plan to help lay the path forward for a future that we can once again see as sustainable for all.

Respectfully submitted.