

Lawrence Pa'lante: Safer Cooler Streets

As part of the Cities Taking Action to Address Health, Equity, and Climate Change Initiative, Lawrence was one of six U.S. cities that received support from the <u>Robert Wood Johnson Foundation</u> and C40 Cities to create transformative community-led projects.

Health, equity and climate risks in Lawrence

Lawrence, Massachusetts is located along the Merrimack River, north of Boston. The city has a rich industrial history and strong immigrant population. Due to its manufacturing economy, Lawrence's landscape has a high density of surfaces that retain heat, such as concrete pavement and buildings. This creates what is known as the urban heat island effect.

Over the last 40 years in Lawrence, 10 days on average have been above 32.2° Celsius (90° Fahrenheit). In less than 50 years this number will more than double. As heat impacts the most vulnerable populations, like the elderly, low-income and outdoor workers, and the chronically ill, many Lawrence residents are at high risk of suffering from extreme heat.

Public transit options in Lawrence are also limited, meaning long walks without much shade. This pushes many people to drive cars, increasing pollution and reducing people's physical activity. Due to a combination of factors, Lawrence residents experience many health challenges.

Lawrence has <u>273 former and current brownfield sites</u> and the second lowest green space per capita in the state. In Lawrence, <u>19% of residents</u> live below the federal poverty line. The city has the <u>highest rate of</u> <u>hospitalisation</u> for cardiovascular disease in the state, as well as more than double the rate of emergency visits for asthma than the state average.

The city also has a strong history of social and political activism. In 1912, the famous textile mill <u>Bread and Roses Strike</u> took place in Lawrence. One of the most significant labour struggles in U.S. history, this was a landmark victory for workers' rights.

What is Lawrence Pa'lante: Safer Cooler Streets?

Lawrence Pa'lante: Safer Cooler Streets is a collaborative project designed to address the interconnected challenges of extreme heat and inaccessibility, while building upon the city's legacy of community activism. Led by the Conservation Law Foundation (CLF), Groundwork Lawrence, and the <u>Pa'lante resident taskforce</u>, the project engages residents to create a cooler, more walkable and connected Lawrence.

The Safer Cooler Streets project builds on the city-wide initiative <u>Lawrence</u> <u>Greenway Framework</u> to "reimagine and reclaim vacant spaces for health and recreation across the city." The cross-organisational team has been working with residents to create a shared vision for a more walkable and connected Lawrence.

The team has raised awareness of climate breakdown, as well as mitigation and adaptation solutions. The project has particularly focused on <u>'cool</u> <u>islands'</u> – central meeting places that feature safe walkable areas, shaded streets, and essential services for residents.

Residents of Lawrence shared their struggles with walking outside in the heat. They noted that the heat was worse for people with pre-existing health conditions, and those who work outside during the day. For many, extreme heat was also a barrier to taking public transport.

The Safer Cooler Streets project takes inspiration from other cities, including Paris, where a <u>cool island has been created</u> along the banks of the river Seine, and a project in <u>Fortaleza, Brazil</u> has reduced pedestrian mortality. The Safer, Cooler Streets project team hosted events, held conversations with residents, and mobilised civil society stakeholders from business and city government to become safer and cooler.

What has Lawrence Pa'lante: Safer Cooler Streets achieved so far?

The Pa'lante resident taskforce

In order to foster deep and ongoing community engagement to inform the project vision and decisions, Groundwork Lawrence and Conservation Law Foundation (CLF) collaborated with residents to establish the <u>Pa'lante</u> <u>resident taskforce</u>.

Pa'lante means to "go forward" both literally and metaphorically. This

captures the focus of the taskforce, as well as being an ode to the community of Lawrence, the <u>vast majority of whom</u> have Puerto Rican, Dominican, or other Latin American heritage. The term has historically been used among young activist circles resisting oppressive policies, inspiring hope and community. Out of this spirit, the Pa'lante resident taskforce was born.

Social media engagement

Groundwork Lawrence and CLF helped create <u>Facebook</u>, <u>Instagram</u>, and <u>X</u> accounts for the Pa'lante resident taskforce, to amplify the project and raise awareness of the urban heat island effect and mobility among residents.

These social channels are now managed by resident taskforce members, including young community leader Destiny Gonzales, who leads on social media campaigns. Destiny has combined her communications expertise and commitment to environmental justice to educate followers about the urban heat island effect. Her campaigns amplify local events related to health, pollution and transportation.

Creating a 'cool island'

A 'cool island' is a central meeting place featuring safe walkable areas, shaded streets, and essential services for residents. Groundwork Lawrence and CLF worked with the Pa'lante resident taskforce to understand which areas of Lawrence would benefit from a 'cool island'.

The 'Bennington Triangle' – a once abandoned gas station and informal parking space – was chosen as a perfect location for a pilot, close to schools and homes.

Groundwork Lawrence, CLF, and the Pa'lante resident taskforce transformed the area into a vibrant community park and meeting place.

Drawing inspiration from Dumbo Improvement District in Brooklyn, New York City, the team hosted the 'Bennington Pop-Up' for a weekend. This involved creating a green space with free food, plants, seats, picnic tables and city buses for people to try. Some residents rarely, if ever, have ridden the bus in Lawrence.

After encouraging feedback from residents, Groundwork Lawrence and

community volunteers kept the green space open through winter.

One year later, the weekend 'pop-up' is still there. Groundwork Lawrence is now working with the City of Lawrence to make this essential community space into a public park.

White Roof Campaign

Studying the heat map of Lawrence, the Pa'lante resident taskforce saw another opportunity to engage the community and address heat. This time it was even closer to home. They noticed that there was one outlier neighbourhood that was a 'cool pocket', despite being a low-income and industrial neighbourhood. This was because one of the large warehouse buildings in the area had a white roof.

<u>Research</u> has shown that dark roofs can get 10–15.5 degrees Celsius (50–60 degrees Fahrenheit) hotter than white- or cooler-coloured roofs. A <u>recent</u> <u>study</u> conducted in Boston saw a 37% reduction of summertime temperatures for local residents after replacing dark with cooler coloured roofs.

Using studies on the cooling benefits of white roofs, members of the Pa'lante resident taskforce conducted a literature review on white roof research, produced a white paper, and created a slide deck to share with Lawrence homeowners.

In collaboration with Groundwork, the taskforce is now working to secure funding for a white roof pilot with some homeowners in Lawrence. The success will be measured through temperature and satellite readings, paving the way for more cooling roofs in Lawrence.

Beyond Lawrence

The work of the Lawrence Pa'lante: Safer Cooler Streets project has been so successful that the Conservation Law Foundation will be establishing further resident taskforces across their networks. Groundwork Lawrence is hiring its first full time community engagement staff member and continuing its support and partnership of the Pa'lante taskforce.

Deanna Moran, Vice President at Conservation Law Foundation and one of the key project team members, said that the CLF "is very motivated to replicate the collaboration with the Pa'lante taskforce and GWL as a model throughout the region... We're thinking more about how to foster placing power and decision-making into the hands of those who live and work in the community."

The resident taskforce members, Groundwork Lawrence, and CLF have collaborated with each other and organised the residents of Lawrence for a safer, cooler community and fostered spaces for community and knowledge – and will be applying these lessons to other initiatives across the state.

This project team included the leadership and participation of the following people (in alphabetical order): Brad Buschur, Deanna Moran, Destiny Gonzalez, Eddie Rosa, Evelyn Rodriguez, Tommaso Wagner, and <u>Pa'lante resident taskforce members.</u>

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