

TURNAROUND FILMS



THE CHELSEA COOL BLOCK

How do you cool down a city block?

This is the problem facing the city of Chelsea, MA, as it struggles with increasing heat brought on by climate change. Heat accumulates in cities where there is too much dark pavement, closely packed black roofs, heavy traffic, and industry, and too little green space. The city, in collaboration with researchers at Boston University School of Public Health and the community organization GreenRoots Chelsea, decided to focus on one block that was much hotter than other parts of the city.

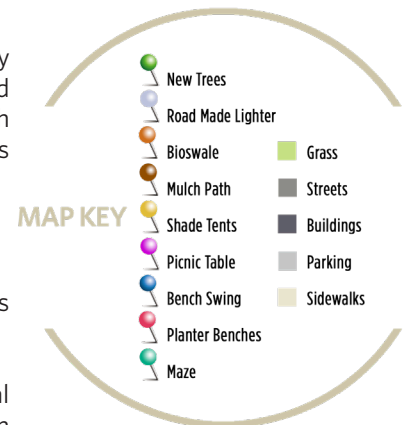
The Cool Block: What did they do?

- Many young trees were planted on Maverick and Willow Street. Once grown, these trees will cool the neighborhood by increasing shade over pavement, buildings, and pedestrians. GreenRoots is providing support for the residents to water the trees and keep them alive while they grow.
- A section of Maverick and Willow Street was repaved with black asphalt and then, using a special machine, lightened to gray. This lighter colored pavement will absorb less heat from the sun than the darker surface would.
- During the paving, new green spaces called bioswales were added to the corner of Maverick and Willow Street. These bioswales use soil and plants to get the water during a rainstorm from the street and into the ground, allowing for evaporative cooling.
- GreenRoots, the Boston Society of Landscape Architects, and neighborhood volunteers cleaned out two vacant lots along Highland Street. The space was transformed into a temporary park with covered, cooling spaces, picnic tables, and a swingset. The City of Chelsea plans to create a permanent park with many of these features included.

What more can be done?

The City of Chelsea and its collaborators still hope to paint the roof of the Jordan Boys and Girls Club white. White roofs reflect the sun's heat more than black roofs do. Increasing the number of white roofs in a neighborhood can bring down the temperature of the air.

The researchers are monitoring the heat in the Cool Block to see how the temperature is affected as the trees grow and other changes are made.



Bench Swing by Mitch Ryerson



Planter Benches