THE B'MORE COOL PROJECT:
A study of the Baltimore Urban Heat Island to inform heat reduction strategies

Ben Zaitchik, Johns Hopkins University
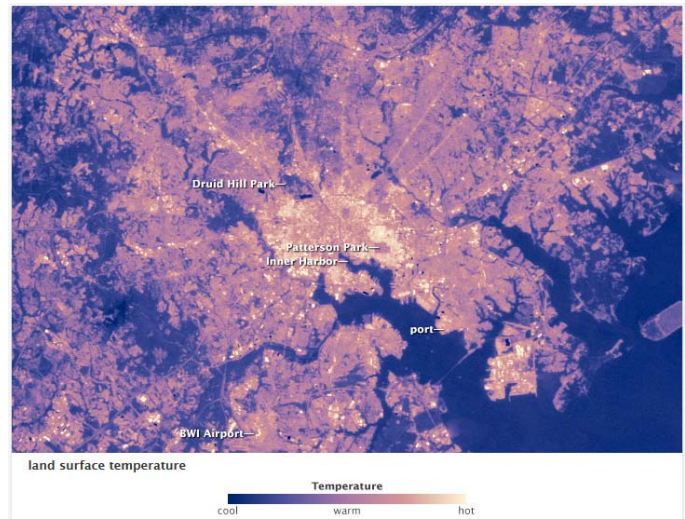Katie O'Meara, Maryland Inst. College of Art
Meredith McCormack, Johns Hopkins University
Kristin Baja, Baltimore Office of Sustainability
And many others!

Summary

Summertime heat extremes are the most deadly climate disaster in the United States today, and the frequency and severity of these events is on the rise due to global climate change. These events are particularly troubling in cities like Baltimore, both because cities are home to large populations vulnerable to heat stress and because cities are often 5-15°F warmer than surrounding suburbs due to the Urban Heat Island (UHI) effect. While we know that the UHI is influenced by urban form, including the height and density of housing, choice of building and paving materials, and the amount of green space in parks and street trees, there is very little data on how the Baltimore UHI differs across neighborhoods and how changes in the urban landscape might enhance or reduce the local magnitude of the UHI.
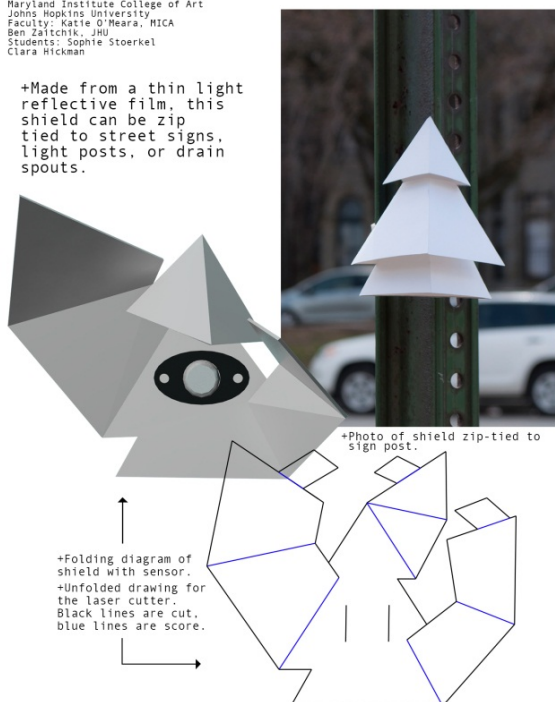
The *B'MORE COOL PROJECT* is intended to engage neighborhood groups and public schools in an analysis of the Baltimore heat island through participatory data collection and analysis. Our goal is to implement a high density, low-cost temperature and humidity monitoring network across the City of Baltimore that is organized and supported by climate, health, and design experts at JHU, MICA, and the City of Baltimore but that is designed and implemented in large part by community members and students.

The measurements collected by *B'MORE COOL* will be used to identify successful strategies for cooling the UHI. These include green spaces, trees, energy efficiency enhancing cool roofs, and other ideas developed by students and community groups. For more information or to get involved please contact Ben Zaitchik at zaitchik@jhu.edu.