
Heat Mapping Campaign Volunteer FAQ

What is the project?

The EcoTarium, WPI's Global Lab and the City of Worcester are conducting a heat mapping campaign this summer to collect real-time ground-level temperature data about the hottest places in our region. Data collected by volunteers will be used to develop a detailed temperature map of the Worcester area (see [Portland example](#)).

Why are we conducting the campaign?

Urban areas are especially prone to high temperatures due to a combination of hard surfaces (buildings, roads), limited vegetation, and heat-producing factors like car use and industrial activity. This problem, known as the urban heat island effect, can create issues for human health, public and private infrastructure, and quality of life. Understanding how temperatures vary based on land cover can inform how we reduce the impacts of rising summer temperatures in our communities.

How are data collected?

Data are collected using a sensor (see picture) mounted to the passenger side of a car (note: the sensor is held in place by the window; nothing is permanently affixed to the car). The sensor takes a temperature reading every second during the drive time. Drivers will be given a pre-determined route produced using Google Maps.

What do volunteers do?

Volunteers are needed to collect data. Drivers will be assigned to one of 8 pre-determined driving routes in Worcester. You can also volunteer as a navigator. Data collection drive times are 6-7 a.m., 3-4 p.m., and 7-8 p.m on the data collection day. Drivers will ideally drive the same route for all three shifts but that is not required for participation.



Are there any requirements as a volunteer?

All volunteers will be required to sign a waiver. Volunteers also need to participate in a volunteer orientation about 3 days before the date of the campaign. Drivers will need a valid driver's license, access to a vehicle, and auto insurance.

Do I get to choose where I drive or help navigate?

Yes, at least initially. Volunteers are asked to identify their preferred driving areas upon sign-up. We will do our best to accommodate your preferences.

When are we conducting the campaign?

Data collection will occur on a day when the expected daily high temperature for the Worcester metro area is 88° F or higher. At this point, we cannot predict what day that will be specifically. Our best window for hitting that temperature threshold is early- to mid-August. *Volunteers will be notified several days in advance when conditions are looking favorable for data collection.*

I am interested in volunteering, schedule permitting. Where can I sign up?

Please sign up as a potential volunteer at this [link](#). You will be emailed a link to signup for times and dates. Because we have to wait for the heat—and the fact that peoples' summer schedules vary—we need to assemble an “on-call” roster of about 50 drivers/navigators to cover the campaign day. As noted above, volunteers will be contacted via email several days in advance when conditions are looking favorable. We will confirm participation and driving routes at that time.

Questions?

To learn more about the methodology and process, check out [CAPA HEAT WATCH](#). For other questions or to volunteer, contact Teri Lynes (tlynes@ecotarium.org) or Stephen McCauley (mccauley@wpi.edu).