**Simplified Temperature Sensor Pilot Description**

**June 2024**

**What is this thing?**

Great question! This is a temperature sensor, which measures the local air temperature and humidity (also referred to as “heat index”). It helps to provide temperature information that can help inform how our city responds to extreme heat. There are 15 sensors like this one, distributed around the city to measure local air temperatures across Boston neighborhoods from June to September 2024.

**Why are you measuring local air temperature?**

This project will help clarify what it would take to establish a citywide temperature sensor network. Sensors have been located in “temperature hotspots'' that are more vulnerable to heat. There are temperature sensors located in the five focus neighborhoods identified in the Heat Plan: Chinatown, Dorchester, East Boston, Mattapan, and Roxbury, as well as Allston-Brighton and Jamaica Plain. Hotspots in these areas can be up to 10-15 degrees warmer than surrounding areas.

Currently, Boston uses temperature readings from the National Weather Service station at Logan Airport to inform the declaration of extreme heat advisories and emergencies. However, temperatures vary across neighborhoods due to many factors including air flow and land cover. At Logan Airport, temperature readings can be 10-15 degrees cooler due to the cooling effect of coastal breezes. Temperature sensors can help us better understand localized temperatures across communities across Boston and prepare for hotter conditions in temperature hotspots.

**Who is involved?**

This is a joint project in partnership with the City of Boston’s Environment Department, The Boston Foundation, Boston University School of Public Health researchers, and A Better City. It is one part of ongoing climate resilience work to study air temperature in the summer. The project aims to inform near-term solutions to keep people safe during heat emergencies and promote “heat resilience” or cooler neighborhoods, buildings, and commutes in the long-term.

**Will the data be shared?**

We will share an analysis of the data and key takeaways in fall 2024. For future summers, we aim to build upon this project to expand a permanent sensor network, with an associated website and publicly available live data dashboard.

**Who can I contact for more information or to report a broken sensor?**

Any comments or questions can be directed to: [insert generic gmail address]. You may also see our research team periodically visiting the sensors to download data every 2 weeks (feel free to say hi!).