**Project Title:** NIHHIS Urban Heat Island Mapping

**Program Office Sponsoring or Conducting this CSC Project:** OAR/Climate Program Office

**Authority for this CSC Project:** CCSA

**Purpose of this CSC Project:** Recognizing heat-related impacts are preventable with planning, education, and action, NOAA and CDC created the National Integrated Heat Health Information System (NIHHIS) as an interagency integrated information system to develop and provide actionable, science-based information to help protect people from heat. Each year NOAA provides funding to CAPA Strategies (a private sector company) to support Urban Heat Island (UHI) mapping campaigns by principally U.S. cities that successfully apply for that support. Those volunteer-based community campaigns build upon local partnerships, engage residents in a scientific study to collect temperature and humidity measurements, which are used to map and understand how heat is distributed in their communities and produce high-quality outputs that are used in city sustainability plans, public health practices, urban forestry, research projects, and other engagement activities. This project, which is part of the larger NIHHIS Urban Heat Island Mapping Program, collects information from campaign participants and applicants, which OAR uses to prioritize where to conducts the campaigns to achieve scientific and environmental justice (EJ) goals of the Climate Program Office and to make reports required under the CCSA. It does not collect temperature and humidity measurements from citizen scientists in a way that collects personally identifiable information with the environmental observations.

**Type(s) of Information Collected and From Whom It Is Collected:** This project collects contact information (name, email, organization, role), city to map, area in square miles, other funding for the campaign, volunteer and in-kind support, justification for experimental monitoring products, statement of need, goals and outcomes, partnerships, volunteer engagement, and environmental justice priorities. It collects this information from campaign organizers, who are typically from not-for-profit institutions and state and local government. The organizers of each campaign funded for a specific year, recruits voluntary participants who use data logger sensors they attach to their cars to collect the outdoor temperature and humidity data.

**Use of the Information:** OAR uses this information from the potential campaign organizers primarily to prioritize where it conducts the campaigns (since there is always more demand than it has capacity to meet) and to collect data required for reporting under the CCSA. OAR uses the data collected by the voluntary participants to map and understand how heat is distributed in communities and produce high-quality outputs that are used in city sustainability plans, public health practices, urban forestry, research projects, and other engagement activities.

**Method(s) of Information Collection:** electronically (internet)

**Affected Public:** Not-for-profit institutions and state and local government

**Estimated Average Annual Number of Participants:** 824

**Estimated Average Annual Number of Responses per Participant:** 4.9

**Estimated Average Minutes per Response:** 50.5

**Estimated Average Annual Burden Hours:** 3,429

**Estimated Total Annual Cost to Participants in this CSC Project:** $0

**Estimated Average Annual Costs to the Federal Government:** $371,184

**Estimated Average Annual Number of Federal Government Employees (FTEs)**: 0.60

**Recruitment and Retention Methods for Voluntary Participants (SSA item 1):** The NIHHIS program works with CAPA Strategies to collect applications (1 from each community) from a lead organization to serve as the local organizer. The local organizer is expected to recruit volunteers using their own networks and methods. We ask about their plans to organize volunteers in the application to ensure they have a robust process planned out but they execute that process.

**Gifts or Payments (SSA Item 9):** We currently do not provide a gift or payment to the voluntary participants. However, as we have moved to a more diverse group of participants, we have repeatedly heard that we should compensate them for their mileage. At some point, we will evaluate the benefits and costs of reimbursing them for their mileage, and make such reimbursements if we determine it is appropriate to do so.

**Annual and Multi-Year Schedules (SSA Item 16):** Applications for the mapping campaigns typically open in October/November the previous calendar year, and responses are due approximately 2 months after applications open. Data collection occurs the following summer. Participants drive 3 one-hour transects (morning, afternoon, evening) to collect data on one day. CAPA Strategies then process the data and maps and reports are released on a rolling basis in the fall after that summer (sometime in Oct-Dec, depending on when the reports are all ready).

**Display OMB Control No. and Expiration Date (SSA Item 17):** This information will be provided when individuals apply to participate in this CSC project**.**

**Statistical Methods:** This CSC project will not employ statistical methods to collect information or extrapolate that information to an entire population.

**Approval for Pretesting:** This CSC project will not require additional pretesting with more than nine members of the public.

**Supplemental Documents**: The supplemental document for this CSC project is an application form for organizations interested in participating in this CSC project. The voluntary participants who collect data for this project use a data logger sensor that they attach to their cars that collects the outdoor temperature and humidity data. The campaign organizers collect the sensors from the voluntary participants and ship them back to the project’s private sector partner that collects the data and processes them. Therefore, the voluntary participants do not use a data collection form.

**CERTIFICATION:** I certify the following are true.

1. The collection is voluntary.
2. The collection is low-burden for respondents and low-cost for the Federal Government.
3. The collection is non-controversial and does not raise issues of concern to other federal agencies.
4. The collection will not include highly influential scientific information, ,which is information NOAA or OMB determines: (i) could have a potential impact of more than $500 million in any year, or (ii) is novel, controversial, or precedent setting or has significant interagency interest.
5. The collection complies with 5 CFR 1320.9 and the related provisions of 5 CFR 1320.8(b)(3).
6. The collection will provide qualitative and quantitative data that help inform scientific research and monitoring, validate models or tools, support STEM learning, and enhance the quantity and quality of data collected to support NOAA’s mission.

Name: Hunter Jones