Charleston Community Research to Action Board

Request for Proposals - Data Management & Analysis Services

Charleston Community Research to Action Board (CCRAB) (www.ccrabsc.org) is seeking a qualified professional or team of professionals to provide data management, analysis and communication services to support community-led environmental and public health research and monitoring in Charleston County, SC. This request is for services only and does not include equipment or any other unallowable costs/activities.

This position is open until filled.

Questions and applications may be sent electronically to Najeema Washington, najeema.washington@ccrabsc.org .

ABOUT CCRAB

CCRAB promotes safe, healthy, and just neighborhoods within environmental justice communities in the Charleston region through community-based participatory research and citizen science. CCRAB facilitates numerous university-community partnerships to investigate environmental and public health concerns identified by residents including but not limited to: air quality, soil quality, water quality, and flooding and climate change impacts. Current research activities are collecting data on: air quality and its public health impacts, flooding and water quality. CCRAB's base communities are located in the Neck Area of Charleston County and include: Accabee, Chicora-Cherokee, Five Mile, Howard Heights, Liberty Hill, Rosemont, Union Heights and Windsor Place.

SCOPE OF WORK

This request for proposals is for a qualified professional or team of professionals to work with CCRAB, its grant partners, and citizen scientists to establish multiple platforms for sharing and communicating air quality and other environmental and public health data that facilitates increased community engagement in ongoing monitoring and ensures data collected through resident-led research is used to inform interventions and policy.

A successful candidate will demonstrate an ability to create systems for data management and communication that can be easily learned and maintained by CCRAB staff and citizen scientists with limited training and support, and that do not require a significant annual financial investment.

The specific responsibilities of the consultant(s) are detailed below.

Develop and maintain affordable and user-friendly systems for long-term data collection and analysis.

- Assist CCRAB staff with the development and evaluation of Quality Assurance Project Plans (QAPPs).
- Assist with the implementation of Quality Assurance Project Plans (QAPPs), including establishing and maintaining systems and procedures for data collection, cleaning, storage, quality assurance, and analysis, backup; including writing and publishing scripts for automation.

- Create systems/structure for manual data entry of supplemental citizen science data.
- Train CCRAB staff in data management and collection protocols.

Establish a Data Access Hub, a centralized location for all environmental and public health data collected by CCRAB and other community partners. Data on the Data Hub will be available for online viewing, download and/or via API feed (when available).

- Determine hardware and software needed to establish the CCCRAB Data Hub.
- Develop an inventory of all data to be shared via the Data Hub.
- Develop systems to maintain desired security/privacy of community data as determined in community data sharing agreements.

Assist with the development and maintenance of an alert system using real-time air quality data to notify residents when there is increased risk of exposure to air pollutants. The alert system will include:

- text and email alerts
- a visible indicator installed on high gear monitors

Develop systems for generating compelling and easy-to-understand data visuals, to be used by CCRAB to communicate air quality and other environmental trends and progress to residents, area policymakers, local governments, public health agencies and non-profits providing services to the focus communities. Focus groups will be used to assist with design, testing and validation of all data access and reporting methods.

- Provide sample reports and data visuals in a variety of formats to test with focus groups consisting of residents and other key stakeholders.
- Train CCRAB staff to generate regular reports.

PROJECT TIMELINE

The initial time period for the services requested will be 24 months, or two years, beginning from the date of hire, with the option for 1-year extensions up to 2 times.

QUALIFICATIONS

- Experience with developing and implementing QA/QC procedures to ensure data integrity.
- Experience in gathering, compiling, visualizing, and analyzing data, including documenting workflows via protocol development, metadata documentation, and production of reports. Experience with environmental and/or public health data is strongly preferred.
- Strong familiarity with open-source, non-proprietary programs and software for data collection, management, sharing and visualization.
- Strong skills in working with spatial data and GIS.
- Experience establishing data collection systems that include crowdsourcing methods and manual field entry.
- Strong skills in development of reproducible data management workflows and programming using scripted software (e.g. R, python, SQL).

- Experience producing data visuals that communicate complex information in accessible, digestible ways.
- Experience managing large and/or diverse datasets (e.g. tabular, spatial, photographic, etc, but especially sensor-based data), including compiling associated metadata
- Experience with setting up and maintaining a shared database, including use of cloud data storage and access when appropriate, and server development and maintenance.
- Familiarity with data sharing agreements and memorandums of understanding, open data, and data sovereignty.
- Experience training or communicating complex technical information to lay people.
- Demonstrated ability to acquire and implement new skills through self-directed learning.

HOURS, COMPENSATION & JOB REQUIREMENTS

- This contract will be paid on a time and materials reimbursement basis, with total payment not to exceed \$231,202 (inclusive of all reimbursables).
- This is a contractor/consultant position and does not qualify for benefits.
- This is a remote position.
- Ability to travel to Charleston, SC on occasion for in-person meetings and events.

SUBMITTAL REQUIREMENTS

- Submittals may be sent electronically to Najeema Washington, Najeema.washington@ccrabsc.org
- 2. All applications should include the following:
 - a. Proposed team members and their roles
 - b. A resume or CV from all team members
 - c. At least two examples of similar work products
 - d. At least two references
 - e. Detailed cost proposal
 - f. Narrative detailing how the applicant meets the required qualifications listed above.
 - g. Documentation of Disadvantaged/Women/Minority Business Enterprise, as applicable. CCRAB is committed to giving disadvantaged businesses (minority, women, or black owned businesses) an opportunity to compete for this procurement. Please submit a copy of the firm's current disadvantaged business enterprise certificate with the application. If your firm is not certified but identifies as a disadvantaged/women/minority business enterprise, please provide a signed statement describing how your firm qualifies as such.
 - h. Statement of compliance with the Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975, as amended prohibiting discrimination on the basis of race, color, national origin, disability or age in programs assisted by the U.S. Environmental Protection Agency.
 - i. Statement of compliance with the Debarment Certification, 43 CFR, Part 12, Section 12.510 and stating that neither the consultant nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

3. The successful firm/consultant shall comply with all applicable federal, state and local government laws, rules, regulations, and orders in the performance of its duties under this proposal and CCRAB's federal grant agreements.

EVALUATION CRITERIA

Proposals by applicants who meet the minimum qualifications listed above will be evaluated on the basis of the following factors:

- a. <u>Proposed Approach</u>. Evaluation of the work to be performed to accomplish the goals outlined in the Scope of Work listed above.
- b. <u>Proposed Team (Specific Individual(s) Responsible for Performance of Contract).</u> Evaluation of the of the individual or individuals who will perform the Contract, giving consideration to their qualifications, reputation, and compatibility with needs of CCRAB and the Project.
- c. <u>Experience of Applicant</u>. Evaluation of the quality and quantity of the applicant's experience and expertise in the areas proposed, supported by references.
- d. Capacity. Evaluation of the applicant's ability and commitment to meet timeline for the Project.
- e. <u>Cost Effectiveness/Budget</u>. Hourly rate, number of hours to be devoted to the project, and indirect rate. Budget line items and associated costs per line item must: a) support the scope of work and b) be appropriate and cost-effective. Budget must ensure compliance with federal procurement guidelines (Federal funds will support this work), including Title 2 CFR 200.

INDEMNIFICATION

The Contractor hereby expressly agrees to indemnify and hold CCRAB harmless against any and all expenses and liabilities arising out of the performance or default of this Agreement as follows:

The Contractor expressly agrees to the extent that there is a causal relationship between its negligent, reckless or intentional wrongful action or inaction, or the negligent, reckless or intentional wrongful action or inaction of any of its employees or subcontractors or any person, firm, or corporation directly or indirectly employed by the Contractor, and any damage, liability, injury, loss or expense (whether in connection with bodily injury or death or property damage or loss) that is suffered by CCRAB and its employees or by any member of the public, to indemnify and save CCRAB and its employees harmless against any and all liabilities, penalties, demands, claims, lawsuits, losses, damages, costs and expenses arising out of the performance or default of this Agreement. Such costs shall include defense, settlement, court costs and reasonable attorneys' fees incurred by CCRAB and its employees. The promise by the Contractor to indemnify CCRAB shall include bodily injuries or death occurring to CCRAB's officers, officials, board members, employees and any person directly or indirectly employed by CCRAB, CCRAB's employees, the employees of any other independent contractors including Subcontractors, or to any member of the public. When CCRAB submits notice, Contractor shall promptly defend any aforementioned action. This obligation shall survive the suspension or termination of this Agreement. The recovery of costs and fees shall extend to those incurred in the enforcement of this indemnity.

NON-DISCRIMINATION

The Contractor shall not discriminate against any individuals based upon age, sex, race, disability, religion, sexual orientation or gender identity and shall abide by the requirements contained in Federal Executive Order Number 11246, as amended, including specifically the provisions of the equal opportunity clause.

TERMS OF PROCUREMENT

CCRAB does not commit to award a contract, to pay for any costs incurred in the preparation of applications submitted, or to procure or contract for the services. CCRAB reserves the right to accept or reject any, all or any part of any application received, or to cancel in part or in its entirety this Request if it is in the best interest of CCRAB to do so. CCRAB shall be the sole judge as to whether interested candidates meet all requirements.