

# Webinar for Potential Applicants to RFA 23-2: Assessing the effectiveness of air quality actions in historically marginalized communities

Health Effects Institute

August 14, 2023

The meeting will begin shortly.

A few logistics before we start:

- If you experience logistical difficulties, please email Quoc Pham: [qpham@healtheffects.org](mailto:qpham@healtheffects.org)
- You can turn on **closed captioning** for the event at the bottom of your screen to the *right* of the Q&A button
- Please put questions about the RFA or application process in the **Q&A** box
- The recording is for internal purposes only
- After the webinar, HEI will post the webinar slides and all questions and answers to the HEI website



# Today's Agenda

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Introduction to HEI and the Environmental Justice Program

Overview of the RFA and Expectations for Research Proposals

Question and Answer Session

# Introduction to HEI and the Environmental Justice Program

# The Health Effects Institute

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- An independent, nonprofit corporation chartered to produce *policy-relevant, high-quality, and impartial science*
- Funded jointly by government and the worldwide motor vehicle industry and, occasionally, private foundations
- Funds research that is selected, conducted, overseen, and reviewed independently of HEI's sponsors
- Does not take policy positions

# How HEI Works

to Provide Impartial Science for Decision Making and Public Understanding

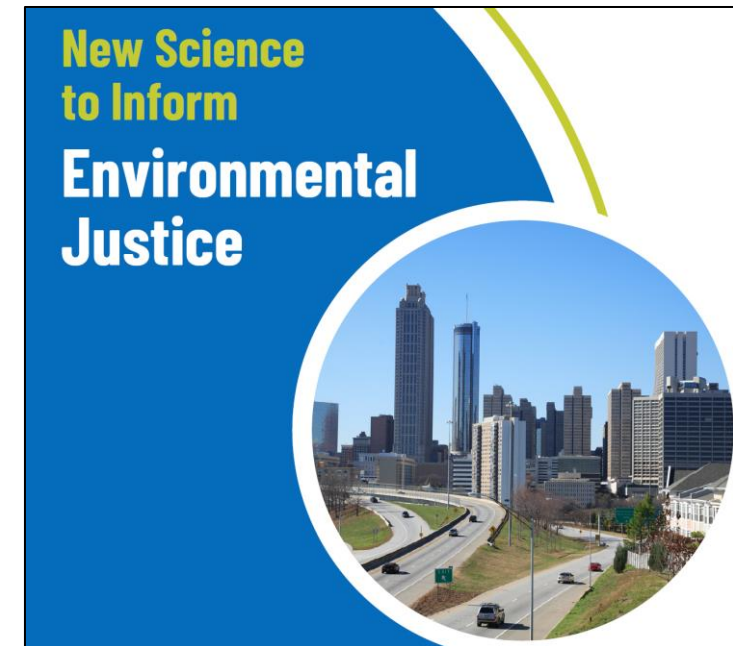


# EJ Workshop Hosted by HEI

October 20-21, 2022 • Atlanta, GA

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- **Purpose:** identifying priorities, barriers and solutions to inform HEI's EJ efforts
- **57 participants** from academic institutions, community organizations, federal government, industry, and NGOs
- **Key Takeaways:**
  - Need for new funding models to support:
    - Partnership building
    - Flexible research designs
    - Research translation that engages multiple sectors
  - Interest in science that does not just document disparities but can *help identify and assess actions to reduce them.*



# HEI's New EJ Program

## Role and Functions

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- Incorporate environmental justice concepts and HEI's existing programs.
- Convene communities, policymakers, academics, and industry to collaborate, share data, and identify solutions to address the drivers of environmental inequities.
- Develop tools and research translation mechanisms for use in decision making.
- Create funding mechanisms to support research and other projects driven by the needs of communities disproportionately affected by environmental pollution.
- Overseen by Oversight Panel and guided by Advisory Council

# Overview of the RFA and Expectations for Research Proposals



# Accountability

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Assess whether actions yield the demonstrable improvements in air quality and public health that were initially projected.



## Characteristics:

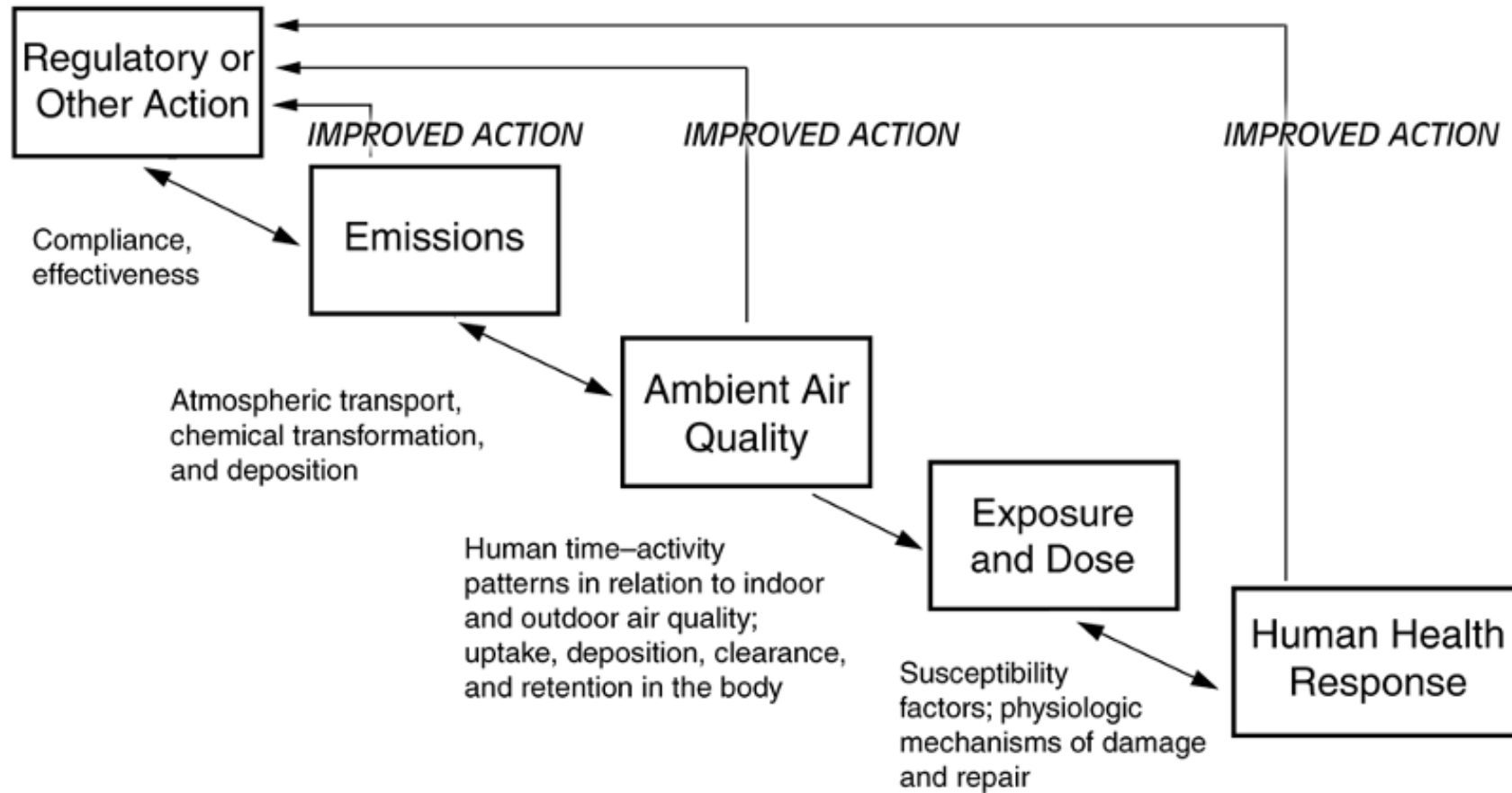
- Compare air quality and/or health before and after action implementation.
- Challenges: disentangle action-related changes in air pollution and health from other time-varying factors; statistical power; lags between implementation and effects.



## Studies have generated:

- New statistical methods
- Lessons learned that inform design and implementation of future efforts to improve air quality

# Accountability



## Overall Objective of RFA 23-2

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Fund studies that evaluate actions, programs, or other interventions in the United States at the national, regional, tribal, state, or local level that have **affected or have the potential to affect ambient or indoor air quality, exposure, health outcomes, or all the above in historically marginalized communities**

# Areas of Interest for RFA 23-2

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- I. Studies that evaluate ***past or current*** actions, programs, other interventions at the national, regional, tribal, state, or local level that were specifically designed and implemented to reduce exposures to ambient or indoor air pollutants and improve health ***in historically marginalized communities***.

## Areas of Interest for RFA 23-2

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2. Studies that evaluate ***past or current*** actions, programs, other interventions at the national, regional, tribal, state, or local level that were specifically designed and implemented to reduce exposures to ambient or indoor air pollutants and improve health ***in the general population*** that might have benefited historically marginalized communities, had an inequitable distribution of benefits among communities, or worsened conditions in historically marginalized communities (e.g., have had unintended consequences).

# Areas of Interest for RFA 23-2 Continued

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3. Studies that evaluate ***proposed*** actions, programs, or other interventions at the national, regional, tribal, state, or local level that are being designed to reduce exposures to ambient or indoor air pollutants and improve health ***in historically marginalized communities***. Studies should be designed to directly inform development and implementation of the proposed action under study.

# Areas of Interest for RFA 23-2 Continued

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4. Studies that evaluate ***past, current, or proposed*** actions, programs, or other interventions at the national, regional, tribal, state, or local level that were or are designed or implemented to achieve goals ***other than decreasing air pollution exposures but indirectly affect ambient or indoor air quality in the general population or in historically marginalized populations.***

## **Examples:**

- policies related to climate change mitigation or adaptation
- actions to increase residential greenspace
- clean mobility programs aimed at reducing greenhouse gas emissions

HEI seeks to fund studies that can accomplish at least one of the objectives listed.

# Key Study Design Features

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## Study Design

- Past or current actions (Objectives 1, 2, or 4): prospective or retrospective epidemiologic or exposure study
- Proposed actions (Objectives 3 or 4): health impact assessment or similar study
  - Ideally collect baseline data to enable future evaluation of the action

## Study Population (U.S. only)

- May use different methods to identify (e.g., CEJST, EJScreen, or as defined under action)
- Identify relevant control or reference group

## Health outcomes

- Relevance for policy
- Association with air pollution
- Community concerns



# Key Study Design Features

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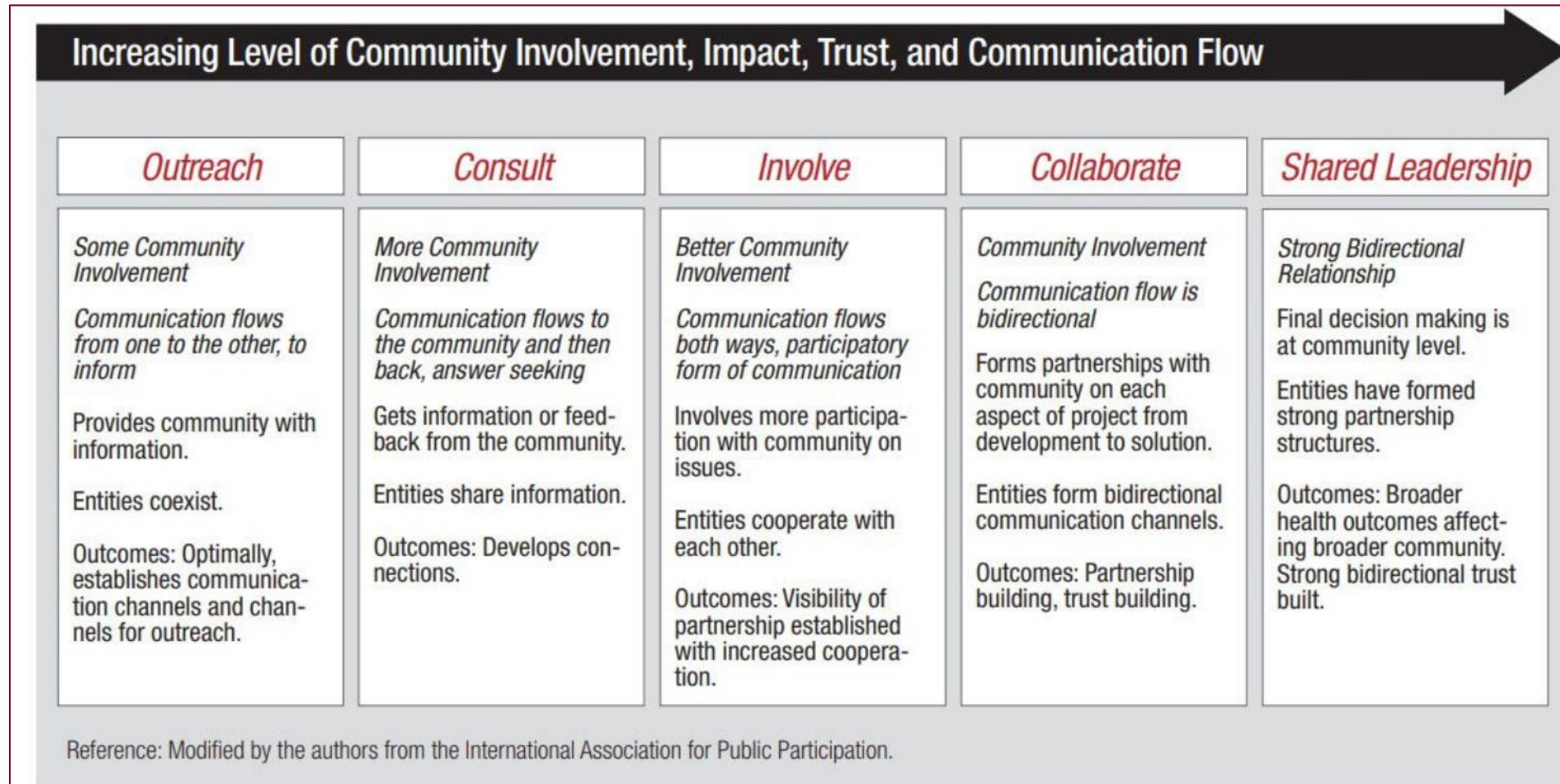
## Exposure Estimation

- Monitoring and modeling
- Existing data: monitoring networks, satellite data, previous measurement campaigns
- Preference for use of standardized sampling methods

## Analytical Methods and Statistical Power

- Traditional or novel epidemiologic and statistical methods
- Environmental inequality indicators
- *Must demonstrate sufficient power to detect changes in exposure, health outcomes, or inequalities*

# Community Engagement



# Criteria for Evaluating Research Applications

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1. **Relevance** to the objectives of the RFA.
2. **Scientific merit** with respect to study design, data collection and analysis methods, modeling approaches, data evaluation, and overall quality assurance.
3. **Experience, competence, and diversity of the research team**, including principal investigator, scientific staff, and collaborating investigators
4. **Adequacy of facilities**, including (1) access to study sites, instrumentation, and relevant data sets; and (2) adequacy and validity of facilities to implement the proposed research.
5. **Reasonableness of the proposed budget**. Community partnerships and community engagement should be reflected in the proposed budget.
6. **Well-developed plan for research translation** to inform decision-making.

# Research Team

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## Principal Investigators

- Researchers with advanced degrees (PhD, MD, or equivalent)
- Affiliated with an eligible established research organization that can accept funds to conduct research from external organizations

If the application includes partnership with a community-based organization, community partners are expected to be included as part of the research team.

We encourage diverse research teams (we adopted the [National Institute of Health definition](#) on populations underrepresented in the scientific workforce).

# Eligible Organizations

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- Lead organization must be an academic or independent, non-profit, free standing research institution
- Scientists from non-regulatory government agencies can participate but not lead a study
- For-profit companies can participate as consultants

# Budget

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Between \$2 and \$3 million will be available for this RFA

- Maximum study budget \$800k
- Indirect costs are capped at 30% (cannot be waived)
- Includes preparation of the final report

HEI expects to fund a small number of studies (2 to 3 years in duration)

# Investigator Commitments

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- HEI issues cost-reimbursement contracts (not grants)
- Follow guidelines for Quality Assurance / Quality Control and data sharing
- Require biannual progress reports, webinars and site visits
- Present a poster at HEI's Annual Conference (between March and May)
- Changes to proposed work or budget require Oversight Panel approval to ensure the study stays true to its original goals and the RFA
- Final reporting requirements

PLEASE REVIEW HEI'S PROCESS BEFORE APPLYING:

<https://www.healtheffects.org/research/investigators/commitments>

# Important Dates

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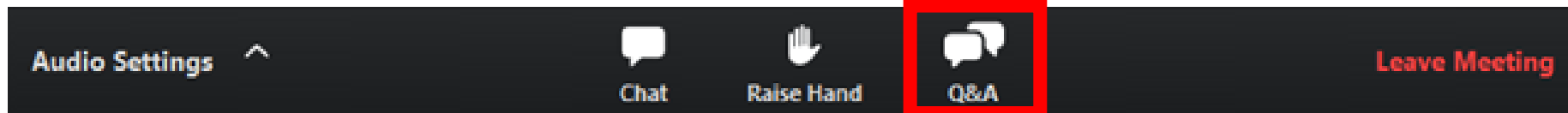
Date	Action
<b>September 29, 2023</b>	Preliminary applications due
<b>Early-November 2023</b>	HEI EJ Panel reviews preliminary applications
<b>End of November 2023</b>	Decisions and feedback to Investigators
<b>Mid-February 2024</b>	Invited full applications due
<b>March 2024:</b>	HEI EJ Panel reviews full applications
<b>April 2024</b>	Winner(s) notified
<b>Spring 2024</b>	HEI Board approval, IRB approval, contract negotiations, and preliminary QA/QC plan
<b>Summer 2024</b>	Studies begin

Send submissions to [funding@healtheffects.org](mailto:funding@healtheffects.org)



# Question & Answer Period

**Please type your questions about the RFA and application process via the Q&A function.**



If you have additional questions, please contact Anna Rosofsky: [arosofsky@healtheffects.org](mailto:arosofsky@healtheffects.org)

For general questions related to the HEI application process, please visit: <https://www.healtheffects.org/faqs>