From: Ridley, David@ARB
Sent: Friday, November 3, 2023 10:37 AM
To: CARB Statewide Mobile Monitoring Initiative
Subject: Fw: Feedback regarding Statewide Mobile Monitoring Initiative RFI (2023CARB_SMMI-RFI001)

From: Maria Harris <mharris@edf.org>
Sent: 03 November 2023 09:29
To: Ridley, David@ARB <david.ridley@arb.ca.gov>
Cc: Ramon Alvarez <RAlvarez@edf.org>
Subject: Feedback regarding Statewide Mobile Monitoring Initiative RFI (2023CARB_SMMI-RFI001)

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Dear Dr. Ridley,

I am writing in my role as Senior Scientist in the Office of the Chief Scientist at Environmental Defense Fund to share feedback related to CARB's Request for Information regarding the planned Statewide Mobile Monitoring Initiative (2023CARB_SMMI-RFI001). Environmental Defense Fund is not intending to respond to the RFI as an interested vendor, but wanted to share brief feedback aligned with Section V.1.b. of the RFI: "Questions, suggested modifications, or additions to the proposed environment that would allow or encourage potential bidders." This feedback is informed by EDF's experience with the collection, analysis, and public communication of mobile monitoring data, including campaigns in Oakland, CA (in a research collaboration including Aclima, Google, and UT Austin) and Richmond, CA (in a research collaboration including CARB).

- We want to express strong support for the requirement stated in the RFI that "Raw and final data will be owned by the State of California and will remain in the public domain to maintain transparency with the public. This data will be owned by CARB in perpetuity with no use limitations" (*Data Requirements, Section C, p. 10*). Depending on the approach vendors use to develop their final datasets, we think it could make sense to extend this public data requirement to an additional stage of data between raw and final, specifically: cleaned and calibrated data that has not been adjusted using modeling/machine learning/fusion with other data (i.e. restricting calibration adjustments to those made on the basis of spans, zeros, or co-locations). This data stage is likely to be most understandable and useful for evaluation, analysis, and interpretation of the data by third party researchers.
- We also believe the value of the data from the forthcoming mobile monitoring program could be amplified if CARB also supported evaluation, analysis, and interpretation of the resulting data by researchers/teams operating independently of the primary mobile monitoring vendors.
- The value of publishing cleaned and calibrated mobile data for analysis by independent researchers was recently demonstrated through the release of "qualified" data sets for California mobile monitoring campaigns that Aclima and Google made available by application to academic researchers. EDF collaborated with Kaiser Permanente Division of Research on research leveraging these mobile data sets in epidemiological analyses linking near-residence pollution levels with cardiovascular disease and increased healthcare costs. Other researchers leveraged these mobile data sets in epidemiological research examining associations with preeclampsia and preterm birth, and in an assessment of the potential environmental benefits of congestion pricing in Los Angeles.

Please let us know if it would be helpful for EDF to share further detail on any of these points or other information that would be useful as CARB develops the forthcoming technical Scope of Work for the Statewide Mobile Monitoring Initiative.

Best regards,

Maria Harris
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Supporting References:

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